



MediaCentral | Ingest User's Guide

Version 2019.2

Legal Notices

Product specifications are subject to change without notice and do not represent a commitment on the part of Avid Technology, Inc.

This product is subject to the terms and conditions of a software license agreement provided with the software. The product may only be used in accordance with the license agreement.

This product may be protected by one or more U.S. and non-U.S. patents. Details are available at www.avid.com/patents.

This guide is protected by copyright. This guide is for your personal use and may not be reproduced or distributed, in whole or in part, without permission of Avid. Reasonable care has been taken in preparing this guide; however, it may contain omissions, technical inaccuracies, or typographical errors. Avid Technology, Inc. disclaims liability for all losses incurred through the use of this document. Product specifications are subject to change without notice.

Copyright © 2018 Avid Technology, Inc. and its licensors. All rights reserved.

The following disclaimer is required by Apple Computer, Inc.:

APPLE COMPUTER, INC. MAKES NO WARRANTIES WHATSOEVER, EITHER EXPRESS OR IMPLIED, REGARDING THIS PRODUCT, INCLUDING WARRANTIES WITH RESPECT TO ITS MERCHANTABILITY OR ITS FITNESS FOR ANY PARTICULAR PURPOSE. THE EXCLUSION OF IMPLIED WARRANTIES IS NOT PERMITTED BY SOME STATES. THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY PROVIDES YOU WITH SPECIFIC LEGAL RIGHTS. THERE MAY BE OTHER RIGHTS THAT YOU MAY HAVE WHICH VARY FROM STATE TO STATE.

The following disclaimer is required by Sam Leffler and Silicon Graphics, Inc. for the use of their TIFF library:

Copyright © 1988–1997 Sam Leffler

Copyright © 1991–1997 Silicon Graphics, Inc.

Permission to use, copy, modify, distribute, and sell this software [i.e., the TIFF library] and its documentation for any purpose is hereby granted without fee, provided that (i) the above copyright notices and this permission notice appear in all copies of the software and related documentation, and (ii) the names of Sam Leffler and Silicon Graphics may not be used in any advertising or publicity relating to the software without the specific, prior written permission of Sam Leffler and Silicon Graphics.

THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

The following disclaimer is required by the Independent JPEG Group:

This software is based in part on the work of the Independent JPEG Group.

This Software may contain components licensed under the following conditions:

Copyright (c) 1989 The Regents of the University of California. All rights reserved.

Redistribution and use in source and binary forms are permitted provided that the above copyright notice and this paragraph are duplicated in all such forms and that any documentation, advertising materials, and other materials related to such distribution and use acknowledge that the software was developed by the University of California, Berkeley. The name of the University may not be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Copyright (C) 1989, 1991 by Jef Poskanzer.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. This software is provided "as is" without express or implied warranty.

Copyright 1995, Trinity College Computing Center. Written by David Chappell.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. This software is provided "as is" without express or implied warranty.

Copyright 1996 Daniel Dardailler.

Permission to use, copy, modify, distribute, and sell this software for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Daniel Dardailler not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Daniel Dardailler makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Modifications Copyright 1999 Matt Koss, under the same license as above.

Copyright (c) 1991 by AT&T.

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, NEITHER THE AUTHOR NOR AT&T MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

This product includes software developed by the University of California, Berkeley and its contributors.

The following disclaimer is required by Nexidia Inc.:

© 2010 Nexidia Inc. All rights reserved, worldwide. Nexidia and the Nexidia logo are trademarks of Nexidia Inc. All other trademarks are the property of their respective owners. All Nexidia materials regardless of form, including without limitation, software applications, documentation and any other information relating to Nexidia Inc., and its products and services are the exclusive property of Nexidia Inc. or its licensors. The Nexidia products and services described in these materials may be covered by Nexidia's United States patents: 7,231,351; 7,263,484; 7,313,521; 7,324,939; 7,406,415, 7,475,065; 7,487,086 and/or other patents pending and may be manufactured under license from the Georgia Tech Research Corporation USA.

The following disclaimer is required by Paradigm Matrix:

Portions of this software licensed from Paradigm Matrix.

The following disclaimer is required by Ray Sauers Associates, Inc.:

"Install-It" is licensed from Ray Sauers Associates, Inc. End-User is prohibited from taking any action to derive a source code equivalent of "Install-It," including by reverse assembly or reverse compilation, Ray Sauers Associates, Inc. shall in no event be liable for any damages resulting from reseller's failure to perform reseller's obligation; or any damages arising from use or operation of reseller's products or the software; or any other damages, including but not limited to, incidental, direct, indirect, special or consequential Damages including lost profits, or damages resulting from loss of use or inability to use reseller's products or the software for any reason including copyright or patent infringement, or lost data, even if Ray Sauers Associates has been advised, knew or should have known of the possibility of such damages.

The following disclaimer is required by Videomedia, Inc.:

"Videomedia, Inc. makes no warranties whatsoever, either express or implied, regarding this product, including warranties with respect to its merchantability or its fitness for any particular purpose."

"This software contains V-LAN ver. 3.0 Command Protocols which communicate with V-LAN ver. 3.0 products developed by Videomedia, Inc. and V-LAN ver. 3.0 compatible products developed by third parties under license from Videomedia, Inc. Use of this software will allow "frame accurate" editing control of applicable videotape recorder decks, videodisc recorders/players and the like."

The following disclaimer is required by Altura Software, Inc. for the use of its Mac2Win software and Sample Source Code:

©1993–1998 Altura Software, Inc.

The following disclaimer is required by Ultimatte Corporation:

Certain real-time compositing capabilities are provided under a license of such technology from Ultimatte Corporation and are subject to copyright protection.

The following disclaimer is required by 3Prong.com Inc.:

Certain waveform and vector monitoring capabilities are provided under a license from 3Prong.com Inc.

The following disclaimer is required by Interplay Entertainment Corp.:

The "Interplay" name is used with the permission of Interplay Entertainment Corp., which bears no responsibility for Avid products.

This product includes portions of the Alloy Look & Feel software from Incors GmbH.

This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>).

© DevelopMentor

This product may include the JCifs library, for which the following notice applies:

JCifs © Copyright 2004, The JCIFS Project, is licensed under LGPL (<http://jcifs.samba.org/>). See the LGPL.txt file in the Third Party Software directory on the installation CD.

Avid Interplay contains components licensed from LavanTech. These components may only be used as part of and in connection with Avid Interplay.

Attn. Government User(s). Restricted Rights Legend

U.S. GOVERNMENT RESTRICTED RIGHTS. This Software and its documentation are “commercial computer software” or “commercial computer software documentation.” In the event that such Software or documentation is acquired by or on behalf of a unit or agency of the U.S. Government, all rights with respect to this Software and documentation are subject to the terms of the License Agreement, pursuant to FAR §12.212(a) and/or DFARS §227.7202-1(a), as applicable.

Trademarks

Avid, the Avid Logo, Avid Everywhere, Avid DNXHD, Avid DNXHR, Avid Nexis, AirSpeed, Eleven, EUCON, Interplay, iNEWS, ISIS, Mbox, MediaCentral, Media Composer, NewsCutter, Pro Tools, ProSet and RealSet, Maestro, PlayMaker, Sibelius, Symphony, and all related product names and logos, are registered or unregistered trademarks of Avid Technology, Inc. in the United States and/or other countries. The Interplay name is used with the permission of the Interplay Entertainment Corp. which bears no responsibility for Avid products. All other trademarks are the property of their respective owners. For a full list of Avid trademarks, see: <http://www.avid.com/US/about-avid/legal-notices/trademarks>.

Adobe and Photoshop are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. Apple and Macintosh are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. Windows is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. All other trademarks contained herein are the property of their respective owners.

Footage

Eco Challenge Morocco — Courtesy of Discovery Communications, Inc.
News material provided by WFTV Television Inc.
Ice Island — Courtesy of Kurtis Productions, Ltd.

Avid MediaCentral | Ingest User’s Guide • Created 3/7/19 • This document is distributed by Avid in online (electronic) form only, and is not available for purchase in printed form.

Contents

	Using This Guide	9
	Symbols and Conventions	10
	Avid Training Services	10
Chapter 1	MediaCentral Ingest Overview	12
	New for MediaCentral Ingest v2019.2	13
	New for MediaCentral Ingest v2018.11	13
	New for MediaCentral Ingest v2018.9	13
	New for MediaCentral Ingest v2018.6	14
	New for MediaCentral Ingest v2018.4	14
	New for MediaCentral Ingest v2017.2	14
	New for Media Director v2.2.1	15
	New for Media Director v2.2	16
	New for Media Director v2.1.1	16
	New for Media Director v2.1	16
	New for Media Director v1.6	17
	New for Media Director v1.5	18
	MediaCentral Ingest Components	19
	The MediaCentral Ingest Engine	19
	The MediaCentral Ingest Drop Utility	20
	MediaCentral Ingest Environment	21
	File Based Workflow	22
	About MediaCentral Ingest Workflows and Processes	23
	MediaCentral Ingest Process Detail Descriptions	28
	Support for Adobe Premiere Pro	32
	Installing the MediaCentral Ingest Profile Application	33
Chapter 2	Using the MediaCentral Ingest Drop Utility	35
	The Classic Media Central Ingest User Interface	37

Typical MediaCentral Ingest Users	37
Accessing the MediaCentral Ingest Installers	39
Configuring the Drop Utility Application	41
Viewing or Changing the Drop Utility Connection	45
Setting the Login Behavior	46
Viewing the Installed Plug-ins	49
Rearranging the MediaCentral Panes in the Classic MediaCentral Ingest UI	49
Docking Panes in the MediaCentral Ingest App	52
Using the Job Builder Pane	54
Controlling MediaCentral Ingest Jobs in the Classic MediaCentral Ingest UI	57
Creating Favorites in the Classic MediaCentral Ingest UI	58
Setting the Queue Priority for a Job in the classic MediaCentral Ingest UI	63
Using the Progress Pane in the classic MediaCentral Ingest UI	64
Displaying the Remaining Time for a Process	66
Using the Profile Builder Pane	66
Using a Watch Folder	67
Using FTP Location as a Volume Source	73
Copy Provider Service - WAN Support	74
Installing the Copy Provider Service	75
Configuring the Remote Parking Storage Base Path	77
Using the Remote Parking Storage Base Path in the Drop Utility Application	77
Ingest to OP1a and Outgest to Op1a Features	78
Presets for MediaCentral Ingest Profiles	78
Overrides for Ingest from OP1a and Outgest to OP1a Profiles	80
Naming Sequences for Outgest to Op1a	81
Transcode Option for Outgest to Op1a and Ingest from Op1a	82
Using XPath Tokens to Pull Text from an XML File	83
MediaCentral Cloud UX Ingest App	86
The Ingest App Screen Elements	86
Using the Summary Bar	87
Creating Jobs	88
Job Cards	89
Running/Submitting Jobs	91

	Deleting Jobs	93
Chapter 3	Using the MediaCentral Ingest Clip Tools	94
	Installing the MediaCentral Ingest Clip Tools Add-On	95
	Displaying Volume Contents	97
	Volume Information	99
	Filtering the Clips in a Volume	100
	Button/status pane (lower left pane)	103
	Clip Details (right pane)	104
	Clip Highlighting	107
	Playing the Media Associated with a Clip	109
	Clip Tools and MediaCentral Ingest Processes	110
Chapter 4	Working with MediaCentral Ingest Profiles	111
	Profile Options	112
	Using the Profile Builder	113
	Editing the Display Tab for a Profile	114
	Editing the Rules Tab for a Profile	118
	Entering Token Values	123
	Additional Tokens for Interplay Clip Name Field	126
	Creating Folder Structures	126
	Token Value Reference	127
	Park and Register Example	131
	Defining the MediaCentral Production Management Folder Structure	134
	Defining the Parking Storage Folder Structure	136
	Defining the Clip Names in the MediaCentral Production Management Database	138
	Using Token Functions	139
	Token Functions	140
	Entering Token Functions in the Profile Builder	143
Chapter 5	Modifying the MediaCentral Ingest Engine Configuration	145
	Accessing the MediaCentral Ingest Administration Overview	146
	Modifying the MediaCentral Production Management Configuration Parameters	148
	Modifying the Op1A Output Parameters for Outgest To Op1A	152
	Modifying the Workflow Foundation Parameters	154
	Modifying the Watch Folder Parameters	158

	Changing the Profile Associated with the Watch Folder.....	158
	Restarting a Service.....	165
	Enabling and Disabling Rewrapping Workers	167
	Changing System Settings.....	170
Chapter 6	MediaCentral Ingest Cleanup	174
	Introduction	174
	Process Cleanup.....	175
	Workflow Cleanup	177
	Rewrapping Cleanup.....	180
	Changing the Schedule of a Task	180

Using This Guide

Congratulations on your purchase of MediaCentral Ingest, an optional service for Interplay Production that allows workgroups to capture field footage shot in various formats quickly by processing it against user-definable profiles.

This guide is intended for all users of MediaCentral Ingest. For additional information, see [“Typical MediaCentral Ingest Users” on page 37](#).

Revision date	Comments
02/28/2019	Updated for v2019.2: “New for MediaCentral Ingest v2019.2” on page 13
12/11/2018	Updated for v2018.11: “New for MediaCentral Ingest v2018.11” on page 13
6/21/2018	Updated for v2018.6: “New for MediaCentral Ingest v2018.6” on page 14
4/27/2018	Updated for v2018.4: “New for MediaCentral Ingest v2018.4” on page 14
12/21/2017	Rebranded and updated for v2017.2. See “New for MediaCentral Ingest v2017.2” on page 14 .
10/26/2017	Updated for v2.2.1: See “New for Media Director v2.2” on page 16 .
07/25/2017	Updated for v2.2. See “New for Media Director v2.2” on page 16 .
05/22/2017	Updated for v2.1.1. See “New for Media Director v2.1.1” on page 16 .
03/30/2017	Updated for v2.1. See “New for Media Director v2.1” on page 16 .
12/20/2016	Updated for v1.6. See “New for Media Director v1.6” on page 17 .
6/28/2016	Updated for v1.5. See “New for Media Director v1.5” on page 18 .
12/17/2015	Updated for v1.4.
09/25/2015	Updated description of Ingest from OP1a profile. See “Ingest from Op1a (Transfer Compatibility mode)” on page 30 .



The documentation describes the features and hardware of all models. Therefore, your system might not contain certain features and hardware that are covered in the documentation.

Symbols and Conventions

Avid documentation uses the following symbols and conventions:

Symbol or Convention	Meaning or Action
	A note provides important related information, reminders, recommendations, and strong suggestions.
	A caution means that a specific action you take could cause harm to your computer or cause you to lose data.
	A warning describes an action that could cause you physical harm. Follow the guidelines in this document or on the unit itself when handling electrical equipment.
>	This symbol indicates menu commands (and subcommands) in the order you select them. For example, File > Import means to open the File menu and then select the Import command.
▶	This symbol indicates a single-step procedure. Multiple arrows in a list indicate that you perform one of the actions listed.
(Windows), (Windows only), (Macintosh), or (Macintosh only)	This text indicates that the information applies only to the specified operating system, either Windows or Macintosh OS X.
Bold font	Bold font is primarily used in task instructions to identify user interface items and keyboard sequences.
<i>Italic font</i>	Italic font is used to emphasize certain words and to indicate variables.
Courier Bold font	Courier Bold font identifies text that you type.
Ctrl+key or mouse action	Press and hold the first key while you press the last key or perform the mouse action. For example, Command+Option+C or Ctrl+drag.

Avid Training Services

Avid makes lifelong learning, career advancement, and personal development easy and convenient. Avid understands that the knowledge you need to differentiate yourself is always changing, and Avid continually updates course content and offers new training delivery methods that accommodate your pressured and competitive work environment.

For information on courses/schedules, training centers, certifications, courseware, and books, please visit www.avid.com/support and follow the Training links, or call Avid Sales at 800-949-AVID (800-949-2843).

1

MediaCentral | Ingest Overview

MediaCentral | Ingest is an optional service for MediaCentral that allows workgroups to capture field footage shot in various formats quickly by processing it against user-definable profiles that orchestrate copy, naming and transcode processes via a powerful rules system.

With this option workgroups can dramatically reduce the time spent performing the following tasks:

- Capturing media from a wide variety of file based cameras
- Creating additional resolutions for various formats to create an efficient production workflow
- Migrating multi-resolution media to make cost efficient use of tiered storage environments
- Making the material available quickly to multiple editors within the MediaCentral Production.

The following sections describe the benefits of using MediaCentral Ingest.

Provide an efficient and consistent method for ingesting file-based material

MediaCentral Ingest has a powerful template-based rules system that allows you to define the copy, transcode, and naming portions of the ingest workflow. You can use standard templates and define your own variations. This eliminates the need for remembering and repeating known ingest policies and ensures that ingest tasks are handled accurately across staff (for example, in-house vs. freelance, different training levels, different locations).

MediaCentral Ingest provides a central server that can process ingest jobs. Individual jobs can be initiated from client machines with LAN access to the server. This frees up valuable editing systems and allows staff to use older client machines to initiate ingest jobs. Operators can prioritize jobs by assigning priorities to a job.

Protect camera originals and save storage space on the production ISIS/Nexis

Camera originals represent a production investment (talent, travel, etc.) and long-term monetizing opportunities. MediaCentral Ingest can be configured to automatically copy camera originals to a central parking storage, such as Avid ISIS, Avid Nexis or licensed 3rd party storage. MediaCentral Ingest allows you to transcode the camera source material to a range of proxy and editing formats, including a high quality (HQ) H.264 proxy suitable for greater-than-HD workflows. This allows you to work with the proxy version on the main

Production ISIS/Nexis and keep the camera sources on the parking storage. This saves storage on the production storage and reduces bandwidth requirements. You can also use MediaCentral Ingest to transcode to a range of full resolution formats as long as no upscaling or frame rate conversions requiring advanced image processing are needed. You can also use a qualified version of an Avid editing application or MediaCentral Transcode service to consolidate from the camera sources to the production ISIS/Nexis at full resolution.



You can also use the MediaCentral Ingest to consolidate an entire volume of AMA material to your production ISIS or Nexis.

Provide support for post-production workflows

Some post-production work flows, such as reality TV, often capture a large ratio of raw footage compared to the size of the final show. Shooting ratios can be up to and in excess of 200:1. This creates a large amount of camera source material. Editors need access to the sources but you don't want to copy them all onto your production ISIS/Nexis system. The concepts of parking storage and dual res work flows works well in a post-production workflow. Your camera sources are stored in their unchanged/native form in a storage area that is easily searchable and you edit with the proxy versions. You can consolidate the material for the final sequences at full resolution to the production ISIS/Nexis when it's time to create final masters. This workflow keeps the camera sources in an area that is protected but still easily accessible by qualified users.

New for MediaCentral | Ingest v2019.2

MediaCentral | Ingest 2019.2 fixes several issues as described in the MediaCentral Ingest Technical Overview document for v2019_2.

New for MediaCentral | Ingest v2018.11

MediaCentral | Ingest 2018.11 fixes several issues as described in the MediaCentral Ingest Technical Overview document for v2018_11.

New for MediaCentral | Ingest v2018.9

MediaCentral | Ingest 2018.9 contains no new features or fixes. There are no new issues as described in the MediaCentral Ingest Technical Overview document for v2018_9.

New for MediaCentral | Ingest v2018.6

MediaCentral | Ingest 2018.6 fixes several issues as described in the MediaCentral Ingest Technical Overview document for v2018_6.

- We now prevent the creation of multiple sequences for volumes that contain a large number of clips.
- Profile Builder now allows using / for xpath token function.
- We have added an improved password check for the SQL administrator account.

New for MediaCentral | Ingest v2018.4

MediaCentral | Ingest 2018.4 fixes several issues as described in the MediaCentral Ingest Technical Overview document for v2018_4.

- Ingest From Op1A now allows transcoding into growing media.
- Outgest To Op1a now allows using Video ID as file name.
- Sequence timecode for flattened sequence returned from Premiere can now be preserved.
- A sequence created by post-processing does now have a thumbnail.

New for MediaCentral | Ingest v2017.2

With the 2017.2 release, Media | Director has been rebranded to MediaCentral | Ingest. This is to unify Avid's product naming and highlight the positioning of the former Media Director product as the media input and processing module on the Avid MediaCentral platform.

- MediaCentral | Ingest introduces support for additional rasters and essence encodings primarily in the UHD and 4K space. Specifically, it adds support for the following operation points:
- DNxHR 'format independent' support up to 4k (4096 x 2160) rasters, 10 or 12 bit, including HDR metadata preservation.
- AVC Intra (including XAVC-I class 300 and 480) 'format independent' support up to UHD TV1 (3840 x 2160, 16:9) rasters, including HDR metadata preservation.
- Format specific presets and overrides
- Bug fixes and small enhancements.

New for Media | Director v2.2.1

Media Director v2.2.1 fixes several issues as described in the Media Director Technical Overview document for v2.2.1. The following changes are made to the documentation:

- Updated the following section in this guide: [“Presets for MediaCentral Ingest Profiles” on page 78](#)
- Added the following information to the Installation Guide for v2.2.1:
 - Information on Windows Security Policy. See the section on “Windows Operating Systems” in the Installation Guide.
 - A section on trouble shooting the Copy Provider Service. See the corresponding section in the Troubleshooting chapter of the Installation Guide.

New for Media | Director v2.2

Media Director v2.2 adds support for Edit While Capture workflows. Using Edit While Capture mode allows users to begin their editing work without needing to wait for the ingest job to be completely finished.

The following profiles permit the use of Edit While Capture:

- Direct Ingest
- Direct Ingest via Cache
- Ingest from OP1a

By default Edit While Capture (EWC) is disabled, but it can be explicitly enabled or disabled as needed on a per profile basis. See [“Editing the Rules Tab for a Profile” on page 118](#).

For additional information on Edit While Capture (a.k.a. “Frame Chase Capture” and “in-progress clips”), see the section on “Frame Chase Capture” in the *Media Composer Editing Guide* on the Avid Knowledge Base.

Note that enabling EWC disables support for spanning clips and AMA workflows with spanning clips.

Also, a new section was added to describe how to create additional watch folders. See [“Using a Watch Folder” on page 67](#).

New for Media | Director v2.1.1

Media Director v2.1.1 is a maintenance release that addresses the following issues:

- Fixed a problem where an upgrade from an activated Media Director 1.x system yielded a non-activated system
- Fixed a problem where the installation could fail on servers belonging to a domain
- Adds a tool for changing the service user credentials
- Adds a link to the administration tool “Control Center”

New for Media | Director v2.1

Media Director v2.1 adds support for the Remote STP Plugin.

Using the Media Director v2.1 Remote STP plugin, a MediaCentral | UX user can send MediaCentral Production assets to an AirSpeed playback server located in a different workgroup. This feature is called remote send to playback (Remote STP). Remote STP is especially useful for large broadcasters who have offices in different geographical locations, some of which host the playback servers (playback offices), and some of which only create content (satellite offices). Remote STP lets a user in a satellite office send an asset directly to a playback server in the playback office.

For information on the Remote STP Plugin and other Media Director v2.1 documentation, see the following link on the Avid Knowledge Base:

http://avid.force.com/pkb/articles/en_US/readme/Media-Director-Version-2-x-Documentation-and-Qualified-AMA-Plugins

New for Media | Director v1.6

Media Director v1.6 adds support for the following:

- Presets and Override support for Outgest to OP1a and Ingest to OP1a Profiles.
 - Presets define details about the target Op1a file. The outgest operation will use these settings to generate the expected output.
 - Overrides influence the ingest and outgest operation in terms of attributes on the source media. The configured overrides change how the operations interpret the source media.

See “[Ingest to OP1a and Outgest to Op1a Features](#)” on page 78.

- Transcode to Panasonic AVC LongG and Sony XAVC Long. Profiles such as “Park, Register, and Transcode” and “Outgest to OP1a” that support Transcode now support the Panasonic and Sony formats.
- Rewrapping and transcoding from Sony XAVC LongG is also supported.
- You can now create a favorite in the Profile Builder that automatically detects whether a media card has been inserted into a removeable drive such as a P2 card reader. Depending on the options you select, the profile will automatically launch a job or open the volume in the Clip Tools. See “[Creating Favorites in the Classic MediaCentral Ingest UI](#)” on page 58.
- When building profiles, you can use the xpath function to pull metadata from an xml file. This allows you to use the information to create folder names, clip names, etc. See “[Using XPath Tokens to Pull Text from an XML File](#)” on page 83.

- You can view a list of the plugins installed on the client system from the Help menu. Use Help > Plugins. See [“Viewing the Installed Plug-ins” on page 49](#).
- You can filter by name when selecting a profile in the Profile Builder. This is similar to the name filter feature available in Windows Explorer. See [“Using the Profile Builder” on page 113](#).

New for Media | Director v1.5

Media Director v1.5 adds support for the following:

- Transcoding from, and/or rewrapping to Panasonic AVC-LongG resolutions to supported formats. See the *Media Director Version 1.5 Technical Overview* document on the Avid Knowledge Base for details on the supported formats and target resolutions.
- Support for integration of Adobe Premiere Pro with MediaCentral UX. MediaCentral and Adobe Premiere Pro support the “MediaCentral Premiere Pro Connector” that supports the following.
 - Create media compatible with Adobe Premiere Pro. The Connector uses Media Director to create simplified versions of MediaCentral sequences or master clips and compatible media for formats where the original media cannot be used directly in Adobe Premiere Pro.
 - Use Media Director to send the active Adobe Premiere sequence back to MediaCentral.

For additional information, see [“Support for Adobe Premiere Pro” on page 32](#).

- Processing sources with more than 16 tracks of audio.
- Post Processing of material created by Media Director allowing you to create a mixdown or sequence from the generated media. See the “Post Processing” options in [“Editing the Rules Tab for a Profile” on page 118](#).
- Support for creation of profile favorites. See [“Creating Favorites in the Classic MediaCentral Ingest UI” on page 58](#).
- Support for automatically running a virus scan at the end of an ingest job. For additional information, see the “Finalize the Installation” section in the *Media | Director Engine Installation Guide*.
- Clip Tools enhancement: Ctrl + Drag and dropping a volume to the Job Builder will automatically open the volume in Clip Tools. See [“Displaying Volume Contents” on page 97](#).

MediaCentral | Ingest Components

MediaCentral Ingest consists of the following components:

- **MediaCentral Ingest Engine:** provides workflow orchestration and media processing services. The MediaCentral Ingest Engine hosts AMA plug-ins and provides the ability to ingest AMA material and native MXF sources, register new clips with the MediaCentral Production Management database, or stage them for ingest to MediaCentral Asset Management, and perform proxy and full res transcode and consolidate operations.
- **MediaCentral Ingest Drop Utility:** provides the user interface for starting and configuring MediaCentral Ingest Engine jobs and for building profiles.
- **MediaCentral Ingest App:** Provides a modern user interface for starting MediaCentral Ingest jobs that can run in a browser.



Note that MediaCentral Ingest AMA plugins are compatible with the latest versions of the Avid editing applications.

The MediaCentral | Ingest Engine

MediaCentral Ingest supports Avid's Media Access plug in technology (AMA) and provides flexible acquisition format support via qualified AMA plug ins. It can also read MXF OP-1a and OP-1b source formats natively, including MXF media that is still being generated or copied.

The MediaCentral Ingest Engine is a self-contained device based on Avid or customer provided standard hardware. Its main functions are to execute automatic workflows that register camera and other file based sources in MediaCentral, to create a choice of Avid Production native editing resolutions for these assets from the source media, and to consolidate or transcode high resolution material to the Avid production storage.

The MediaCentral Ingest Engine connects Avid's storage and asset management solutions with external sources of media and metadata such as camera storage media or video servers, and offers automated workflows to move media from those sources into a MediaCentral Production Management or MediaCentral Asset Management environment in automated way.

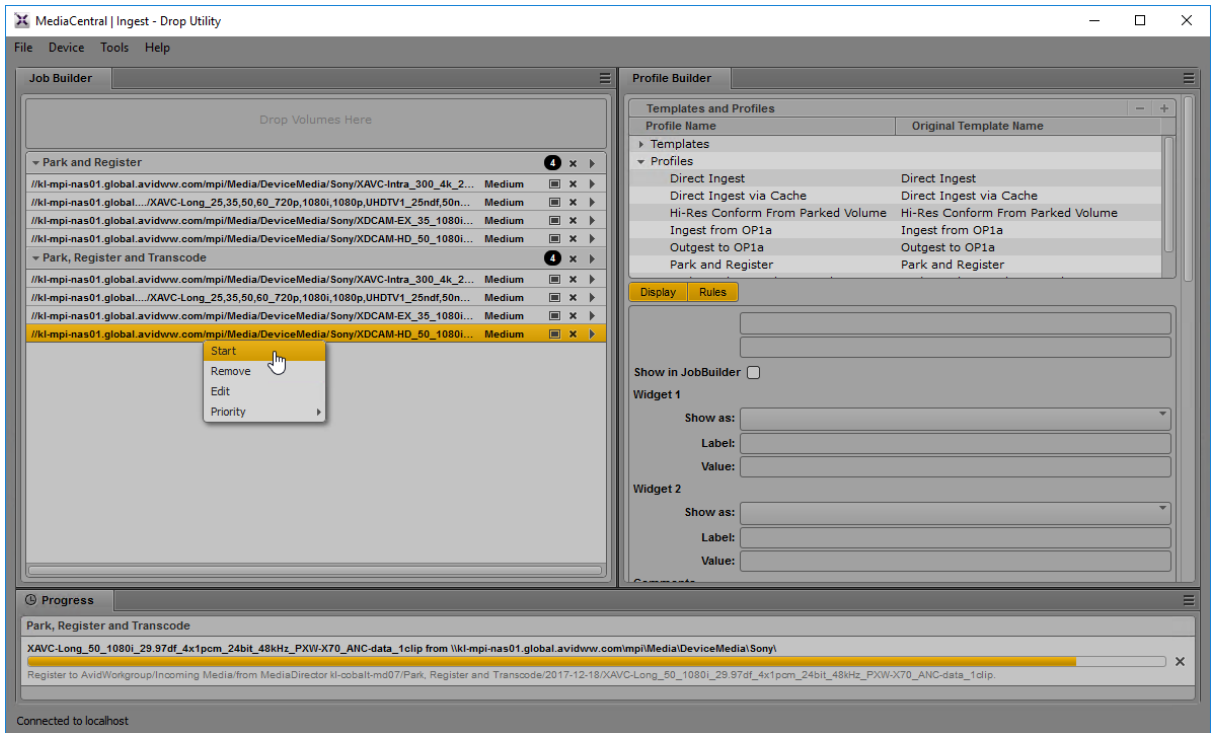
MediaCentral Ingest Engine includes a workflow engine that drives a scalable number of media processing services through a predefined set of workflows. It also contains adapters that can orchestrate MediaCentral Production Management operations such as checking in assets.

The MediaCentral | Ingest Drop Utility

MediaCentral Ingest Engine ships with an OS-native client application for Windows and Mac OS X, the MediaCentral Ingest Drop Utility. The Drop Utility displays a user interface based on the MediaCentral | UX interface. Its main functions are as follows:

- Start MediaCentral Ingest jobs based on a selectable profile and optional additional parameters
- Create and work with profiles and provide feedback about job status and progress

The Drop Utility application has three main sections, the Job Builder, the Profile Builder, and the Progress pane as shown in the following illustration.

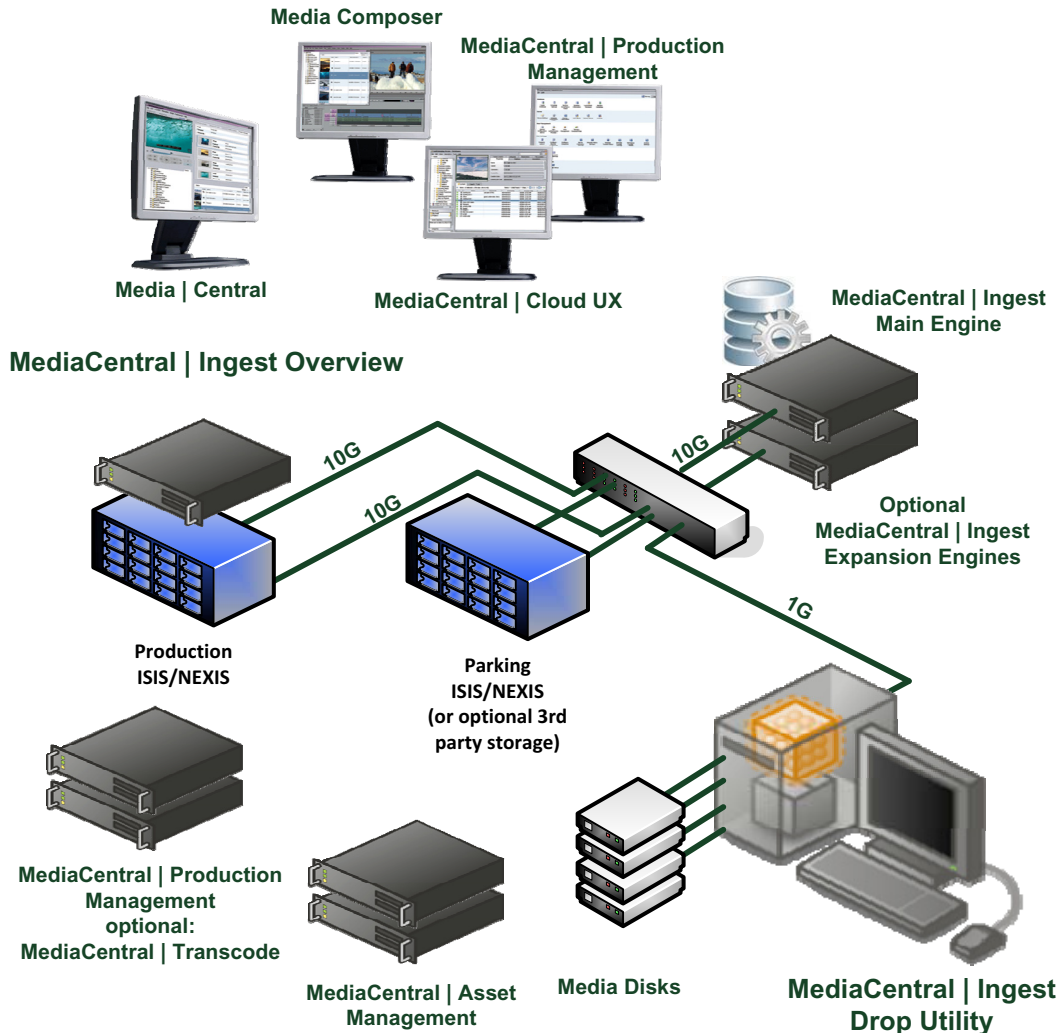


Clip Tools

Clip tools are an add-on to the MediaCentral Ingest Drop Utility that, once installed, enhance the feature set of the Drop Utility. Clip Tools allows you to select individual clips or groups of clips for processing. For additional information, see [“Using the MediaCentral | Ingest Clip Tools”](#) on page 94.

MediaCentral | Ingest Environment

The MediaCentral Ingest Engine is part of an Avid MediaCentral Production environment as shown in the following illustration.



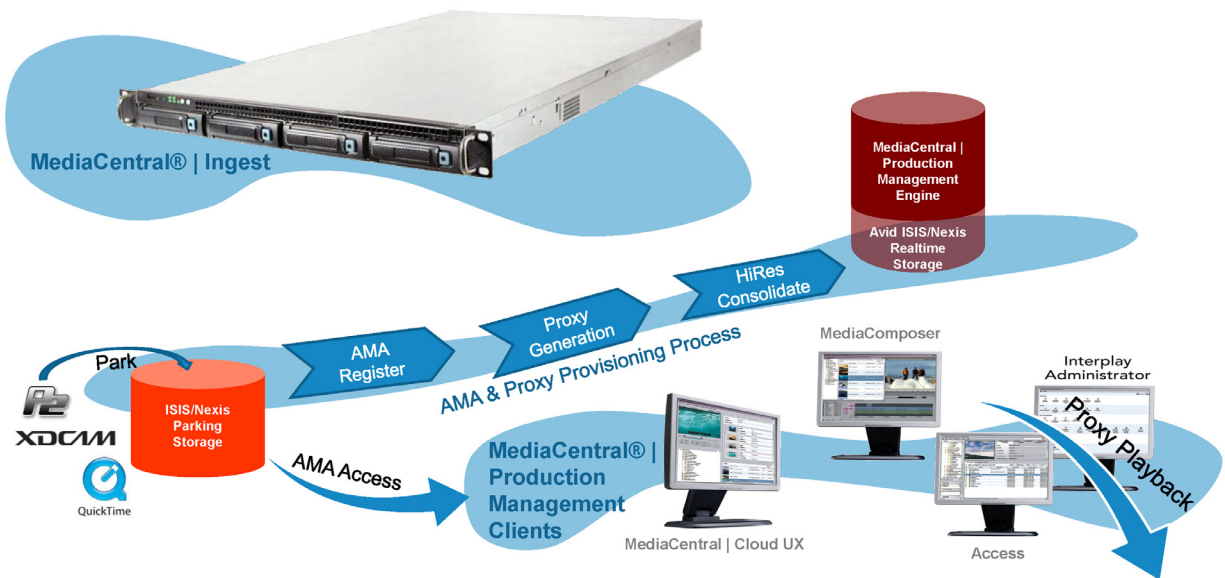
The MediaCentral Ingest Engines' AMA registration and multi resolution capabilities require the following infrastructure to fully leverage the functionality:

- Interplay Production 3.1.x or higher or MediaCentral Production Management 2017.2 or better.
- Avid ISIS or Nexis production shared storage for Avid-native media and proxies.

- ISIS or Nexis storage for camera-native media.
- Enterprise-class networking recommended; fully Avid-qualified 10G infrastructure between MediaCentral Ingest Engine and ISIS/Nexis shared storage.
- Note that 10G client connectivity is optional.

File Based Workflow

The following illustration shows the basic AMA workflow.



The basic workflow for the MediaCentral Ingest process named Park, Register and Transcode consists of the following steps:

1. Insert the camera formatted media such as backup disk with camera media, a P2 card, or XDCAM disk into a reader on the MediaCentral Ingest client.
2. Drag the volume onto the MediaCentral Ingest client and select a predefined 'Park, Transcode and Register' Profile.
3. For workflows containing Park, MediaCentral Ingest copies the media from the card or disk to a parking storage system such as an ISIS, NEXIS or 3rd party parking storage. This parking storage provides a single location where you can always find a copy of your original media. This allows AMA workflows to function reliably no matter what happens to the original carrier.



Support for non-ISIS parking storage is a licensable option.

4. For workflows that contain Register, MediaCentral Ingest uses an AMA register process to create an AMA-linked asset in the Production database. These assets point to the media on the parking storage.

At this point the media is available for a limited number of users that can work directly with high res AMA material. For example, you can now edit the material on a Media Composer system. This is represented by the “AMA Access” portion of the illustration.

5. Next (if the Park, Register and Transcode workflow is used), the MediaCentral Ingest server uses its built in transcoding capability to create a proxy.

Once the proxy is available, editors and other MediaCentral clients can relink to the proxy. This makes the material available to a much larger group of users such as MediaCentral | Cloud UX, Media Composer, and Media Composer | Cloud.

This finishes the MediaCentral Ingest Park, Register and Transcode process.

Once the editors and producers create their sequences and other output based on the proxy, editors can use the Avid editing application or the MediaCentral Transcode service to initiate a transcode/consolidate operation to bring the desired high res material onto the ISIS or Nexis shared storage system in the MediaCentral Production Management environment. This will copy the desired portions of the original AMA material from the parking storage onto the ISIS/Nexis shared storage in the OP-ATOM format used by Avid applications.

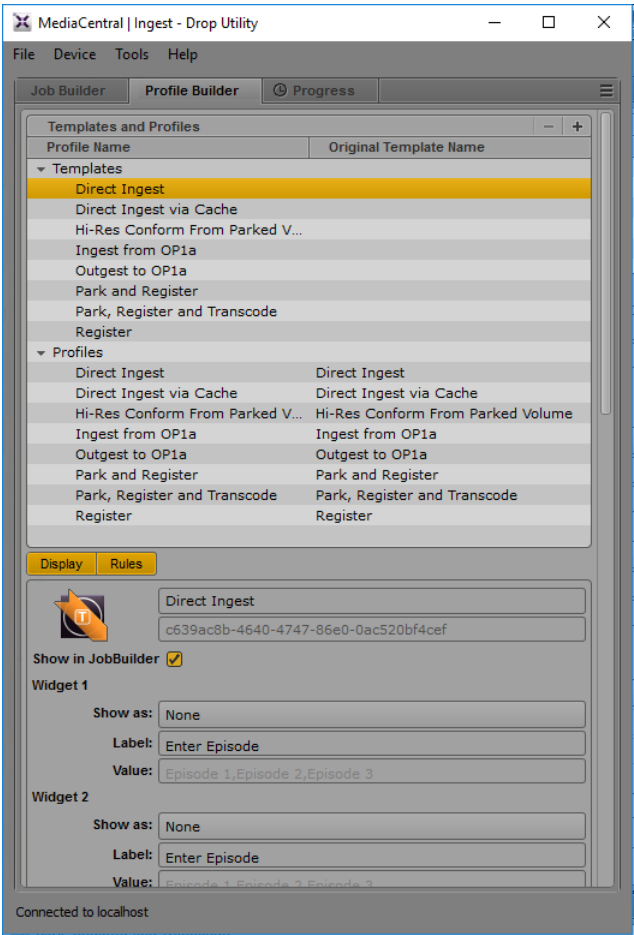


You can also use the MediaCentral | Ingest Consolidate from Parking workflow to transcode or rewrap all of the AMA material in a volume to the Production ISIS/Nexis system.

About MediaCentral | Ingest Workflows and Processes

When a new job is submitted, the job profile defines which of the built-in processes are executed. Depending on the profile, the user may have the opportunity to supply additional detail information to the process such as the clip name or the name of a MediaCentral Production database folder to create to store the clip metadata.

For every process built into the MediaCentral Ingest Engine, there is a profile template in the Templates folder as shown in the following illustration:



From those templates, you can create profile “instances” or copies that are tailored to a specific purpose via a set of storage and naming rules. The profile instances start the process they link to with different rules and dynamic data. Even though profiles can be renamed, they remain linked to the original process template. The right column in the profile list shows the original process template that a template has been derived from.

If the 'Ingest to OP-1a' toggle is enabled, additional profiles become available and can be used for ingesting MXF OP-1a media media to MediaCentral Asset Management.

The following table lists the MediaCentral Ingest built-in processes.

Process Name	Process Description
Direct Ingest	Directly rewraps volumes from the source carrier to Production Storage (ISIS or Nexis) without copying the AMA clips first. The Transcode portion of the profile contains a “transparent pass-through” option. This option treats native codecs as follows: • If the native codecs are supported in MediaCentral Production Management, they are preserved. • Some AMA plugins provide only uncompressed frames for media like GoPro and some Quicktime files. As uncompressed frames cannot be consolidated, MediaCentral Ingest automatically transcode these formats to XDCAM HD 50 instead.  <i>You can change the default XDCAM HD 50 resolution to another resolution. See “Modifying the Workflow Foundation Parameters” on page 154.</i> When using 'Direct Ingest', media can optionally be written in 'growing' form (EWC) so editing can commence while the media is still being transferred. When turned on, this option will disable AMA linking workflows and support for spanning media; every segment of a spanning clip will appear as individual clip. Due to limitations in the AMA plugin technology, growing source media is not supported.  UNC paths mounted as drive letters can not be used with Direct Ingest.

Process Name	Process Description
Direct Ingest via Cache	This process is similar to Direct Ingest except that the AMA media is first copied (cached) and then processed from the parking storage. This is intended for source carriers that cannot be efficiently processed by the services running on a MediaCentral Ingest, for example because they are small, fragmented or cannot be read as a network share. Having MediaCentral Ingest read a volume efficiently requires the driver to support multi-user access since MediaCentral Ingest may source parallel read requests. (Some USB card readers and the pertinent drivers only support single user access). The Direct Ingest via Cache process works around this limitation and optimizes performance by tasking a dedicated service installed on the client (the copy provider service) with the copy operation. The MediaCentral Ingest Engine will then automatically pick up the media from the high performance parking storage and consolidate or transcode it from there. Note that for EWC operations, EWC rewrapping or transcoding will not start before the source has been fully copied (cached); this is necessary to present the full source volume to the AMA plugins. If you need a process that is as immediate as possible, consider using the 'Direct Ingest from OP-1a' profile instead.
Hi-Res Conform from Parked Volume	Rewraps volumes on Parking Storage to Production Storage (ISIS) while preserving logging information on AMA clips and proxies. In The Transcode portion of the profile contains a “transparent pass-through” option. This option treats native codecs as follows: • If the native codecs are supported in MediaCentral Production workgroup, they are preserved. • Some AMA plugins provide only uncompressed frames for media like GoPro and some Quicktime files. As uncompressed frames cannot be consolidated, MediaCentral Ingest automatically transcode these formats to XDCAM HD 50 instead.  <i>You can change the default XDCAM HD 50 resolution to another resolution. See “Modifying the Workflow Foundation Parameters” on page 154.</i>

Process Name	Process Description
Ingest from Op1a (Transfer Compatibility mode)	Ingest from Op1a is a process with unique features (and limitations) primarily for supporting ingest scenarios from single OP-1a files as found, for example, on video servers, or unstructured folders containing a flat hierarchy of OP-1a files. The Ingest from Op1a process is designed to provide the fastest possible conversion of OP-1a wrapped source media* presented either in a folder or as single file, comparable with the capabilities of MediaCentral Transfer. Unlike MediaCentral Transfer, the 'Ingest from Op1a' process can also transcode source media even when both the source and the target are growing (EWC). Users can now use the Profile Builder to create Ingest from Op1a profiles that can be used with the watch folder service or directly with the Drop Utility. While all other MediaCentral Ingest processes strictly preserve the source media ID as a prerequisite for Link (AMA) workflows, Media ingested through the Op1a Process will always show up as new, independent asset similar to the way MediaCentral Transfer behaves. This allows re-ingesting the same source multiple times to create independent assets but also invalidates Link (AMA) workflows: Media ingested through the Op1a process produces traditional Avid media that is 'disconnected' from its source, and linking back to the original media is not supported. * in formats natively supported in Production workgroups, such as XDCAM HD or AVC-Intra.
Outgest to OP1a	The Outgest to OP1a process instructs the MediaCentral Ingest services to perform an OP-Atom to OP-1a conversion. If an external MediaCentral Transcode instance is available and configured, the Outgest to OP1a process can also export sequences by orchestrating a Mixdown operation prior to export. Outgest to OP-1a natively handles master clips and sub clips. 'Outgest to OP-1a' writes target files so they can be read by a downstream system while still growing ('left-to-right') but does not support Avid Atom sources in growing ('EWC') state.
Park and Register	Parks volumes on Parking Storage and registers them as AMA clips in MediaCentral Production Management 3.0 and higher.

Process Name	Process Description
Park, Register & Transcode	Parks volumes on Parking Storage and registers them as AMA clips in Interplay Production v3.x or newer or MediaCentral. Transcodes source material from parking storage to user-definable proxy format.  <i>Starting at Media Director v1.1 or MediaCentral Production Management, you can specify two different Transcode resolutions in separate subfolders under the base Production ISIS folder. Note that both resolutions are created sequentially, starting with the first configured format. EWC is enabled only for the first resolution.</i>
Register	New for Media Director v1.1. Allows you to register (or re-register) assets that are already on parking storage.

The following section describes the Processes in detail.

MediaCentral | Ingest Process Detail Descriptions

The MediaCentral | Ingest Direct Ingest Process

The MediaCentral Ingest Direct Ingest process is designed for customers who want to use a classic Avid workflow where all source material is transferred to the production ISIS or NEXIS storage and made available as native Avid assets in MediaCentral Production Management.

Under the Direct Ingest Process source media does not get parked; rather it is consolidated over to the production storage directly from the source. This assumes that the source media carrier/disk is large and fast enough to keep one of MC|I's media processing services busy for the duration of the ingest. Depending on the target resolution setting in the profile, media will either be transcoded to one of the formats supported by MediaCentral Ingest, or – if “transparent pass-through” is selected in the profile – will be converted (rewrapped) to native Avid media without re-encoding. Sources are read through the matching AMA plugin. Since different AMA plugins provide a different level of support in the case of “transparent pass-through”, the ingest operation will be handled as one of the following two cases:

- If the source media contains essence that is natively supported in MediaCentral Production, the source media will be rewrapped to OP-Atom, placed onto the Production ISIS or Nexis storage, and checked into MediaCentral Production Management according to the rules defined in the profile. This is the default behavior of the “transparent pass-through” option and is one of the fastest operations available.
- Some AMA plugins provide only uncompressed frames for media like GoPro and some Quicktime files. As uncompressed frames cannot be consolidated, MediaCentral Ingest automatically transcodes these formats to XDCAM HD 50 instead. Alternatively, a specific

‘transcoding’ target resolution can be defined in a profile. Because a transcoding step is involved, these options will be slower than the pure rewrapping operation from the previous case. Since the source media is read through the AMA plugins, the plugins also define the possible throughput to a large extent. Specifically, single threaded plugins like Apple QuickTime will provide significantly lower throughput.



You can change the default XDCAM HD 50 resolution to another resolution. See “Modifying the Workflow Foundation Parameters” on page 154.

For a list of supported AMA plugins, see the table of “Supported Volumes Types” in the *MediaCentral | Ingest Supported Volumes and Formats* document on the Avid Knowledge Base.



UNC paths mounted as drive letters can not be used with Direct Ingest.

The MediaCentral | Ingest Cached (Direct via Cache) Ingest Process

The MediaCentral Ingest Cached Ingest process is designed for customers who want to use a classic Avid workflow where all source material is transferred to the production ISIS or NEXIS storage and made available as native Avid assets in MediaCentral Production Management.

Under the Cached Ingest Process the source is first copied (cached) and then processed from the cache storage; this is intended for source carriers that are small or connected in a way where it does not make sense for one of MC|I's media processing services to work on the media directly. The encoding of the source can be preserved or transcoded. Sources are read through the matching AMA plugin; since different AMA plugins provide a different level of support the ingest operation will be handled as one of the following two cases:

- If the source media contains essence that is natively supported in a Production workgroup, the source media will simply be rewrapped to OP-Atom, placed onto the Production ISIS or NEXIS storage, and checked into MediaCentral Production Management according to the rules defined in the profile. This is the “transparent pass-through” option.
- Some AMA plugins provide only uncompressed frames for media like GoPro and some Quicktime files. As uncompressed frames cannot be consolidated, MediaCentral Ingest automatically transcodes these formats to XDCAM HD 50 instead. Alternatively, a specific “transcoding” target resolution can be selected in a profile. When a transcoding step is involved, the operation will be slower than the pure rewrapping operation from the previous case. Since the source media is read through the AMA plugins, the plugins also define the possible throughput to a large extent. Specifically, single threaded plugins like Apple QuickTime will provide significantly lower throughput.



You can change the default XDCAM HD 50 resolution to another resolution. See “Modifying the Workflow Foundation Parameters” on page 154.

The MediaCentral | Ingest Hi-Res Conform From Parked Volume Process

This process rewraps volumes on Parking Storage to Production Storage (ISIS) while preserving logging information on AMA clips and proxies. It preserves the native codec if supported in the MediaCentral Production workgroup. If the source formats are not natively supported it transcodes the sources to XDCAM HD 50.



You can change the default XDCAM HD 50 resolution to another resolution. See “Modifying the Workflow Foundation Parameters” on page 154.

The MediaCentral Ingest Hi-Res Conform from Parked Volume process is designed for customers who want to add additional resolutions to existing AMA or proxy assets to MediaCentral Production workgroups. This process will add the new resolution in a nondestructive way, meaning that markers or subclips created for the AMA or proxy resolutions will be unaffected.

A possible use case for this workflow would be to bring high resolution media online before finishing work starts on a project. Assistant editors could have created shot selections and marked areas of interest based on the AMA or proxy media, conserving space on the production ISIS/Nexis. Editing and finishing would then be performed in MediaCentral Production Management, with full availability of all standard Avid workflow, archive and transfer options.

Ingest from Op1a (Transfer Compatibility mode)

Ingest from Op1a is a process with unique features (and limitations) primarily for supporting ingest scenarios from single OP-1a files as found, for example, on video servers.

The Ingest from Op1a process is designed to provide the fastest possible conversion of OP-1a wrapped source media* presented either in a folder or as single file, comparable with the capabilities of MediaCentral Transfer. Users can use the Profile Builder to create Ingest from Op1a profiles.

While all other MediaCentral Ingest processes strictly preserve the source media ID as a prerequisite for Link (AMA) workflows, Media ingested through the Op1a Process will always show up as new, independent asset similar to the way MediaCentral Transfer behaves. This allows re-ingesting the same source multiple times to create independent assets but also invalidates Link (AMA) workflows: Media ingested through the Op1a process produces traditional Avid media that is “disconnected” from its source, and linking back to the original media is not supported. The 'Ingest from Op1a' is the only process that supports growing MXF OP-1a/b source media and - if enabled - writes native Avid OP-Atom in 'EWC' mode.

* in formats natively supported in MediaCentral Production, such as XDCAM HD or AVC-Intra.

The MediaCentral | Ingest Outgest to OP1a Process

The Outgest to OP1a process instructs the MediaCentral Ingest services to perform an OP-Atom to OP-1a conversion. Outgest to OP-1a natively handles master clips and sub clips. If an external MediaCentral Transcode instance is available and configured, the Outgest to OP1a process can also export sequences that do not use effect plugins by orchestrating a Mixdown operation prior to export.

The MediaCentral | Ingest Park & Register Process

This process parks volumes on Parking Storage and registers them as AMA clips in Interplay Production 3.0 and higher or MediaCentral Production Management.

The MediaCentral Ingest Park & Register process is designed for applications where minimal latencies and maximum conservation of production resources are desired at the expense of ISIS/Nexis bandwidth and interactivity. The process copies the source media to the Parking Storage and relies on the Avid AMA technology for playing back media from the Parking Storage.

This means that all streams will play back as full resolution; consequently the user experience will depend on the bandwidth available on the Parking Storage and may be sluggish some times.

This process is best suited for a small number of users who need the fastest possible access to media and are willing to accept that bandwidth is not guaranteed in order to conserve the maximum amount of production capacity.

The MediaCentral | Ingest Park, Register & Transcode Process

This process parks volumes on Parking Storage, registers them as AMA clips in Interplay or MediaCentral Production, and transcodes the source material from parking storage to a user-definable proxy format.

The MediaCentral Ingest Park, Register and Proxy process is designed for applications where a larger number of users want to work on a proxy copy of bandwidth-intensive source material. For example, this could include a large production department that wants to work with UHD or 4K sources.

The MediaCentral Ingest Park, Register & Transcode Process will copy the source media to the Parking Storage and then first make the media available to Media Composer clients through the Avid AMA technology to provide quick access to a subset of the departmental users. It will then proceed by creating a proxy copy of the source media for low latency, low storage footprint playback from the production ISIS or Nexis.

Once editing on the proxy copy is complete, users have a variety of options for creating full resolution output:

- In scenarios where all participating system components fully support AMA workflows, no actual import of high res media is necessary. For example, full resolution output clips can be generated directly from the AMA linked media on the parking storage.
- For cases where production components do not yet fully support AMA workflows, full resolution media can be consolidated over from the parking storage. This can be done in two different ways; for clip-based consolidate or if transcoding to non-native high-res formats is required, MediaCentral Transcode or Media Composer can be used. The MediaCentral Ingest Engine in turn offers lossless high-speed rewrapping for high-res formats that are natively supported in MediaCentral Production workgroups.

Depending on the resolutions available, streams will play back either as full-res AMA stream from the parking storage or as proxy or full resolution from the Production shared storage, the same way as today in classic MediaCentral Production workflows.



Note that relinking to either available resolution requires a manual operation through the Dynamic Relink function of the Avid editors.

The MediaCentral | Ingest Register Process

This process is used to register or re-register media that has already been parked, or update AMA media locations when the AMA media has been moved to a different storage location.

Support for Adobe Premiere Pro

Media Director v1.5 and higher supports the integration of Adobe Premiere Pro and MediaCentral UX v2.7 and higher. MediaCentral and Adobe Premiere Pro both support the “MediaCentral Premiere Pro Connector” that supports the following.

- Create media compatible with Adobe Premiere Pro. The Connector uses MediaCentral Ingest to create simplified versions of MediaCentral sequences or master clips and compatible media for formats where the original media cannot be used directly in Adobe Premiere Pro.
- Use MediaCentral Ingest to send the active Adobe Premiere sequence back to MediaCentral.

For details on installing, configuring, and using the MediaCentral Premiere Pro Connector, see the *Avid MediaCentral Premiere Pro Connector ReadMe* on the Avid Knowledge Base.



Obtain the document from the Knowledge Base before installing and configuring the connector.

Installing the MediaCentral Ingest Profile Application

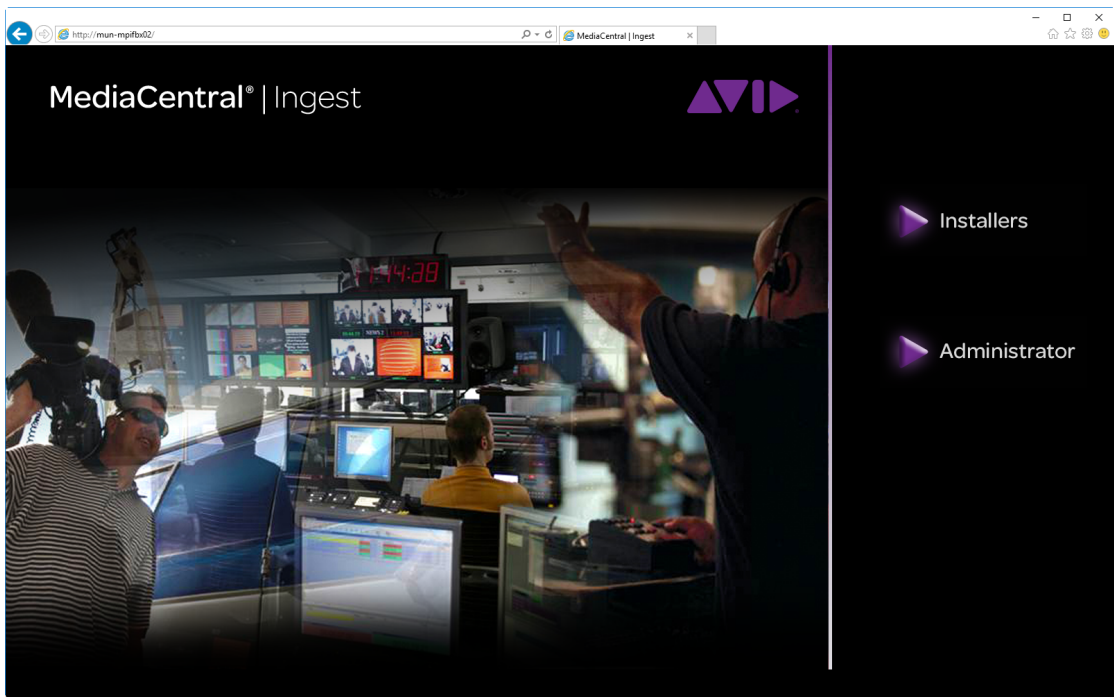
Before the MediaCentral Ingest option can be used with Adobe Premiere Pro, the Adobe Premiere Default profile and/or the Adobe Premiere 'Edit While Capture' profile must once be created by a MediaCentral Ingest administrator using the MediaCentral Ingest Profile Installer. The installer can be accessed from the MediaCentral Ingest web interface.

To access the MediaCentral | Ingest web interface:

1. Open a browser and navigate to following URL:

`http://<engine name>`

The following illustration shows the web interface.



To access the Installers web page on Windows use Chrome, Mozilla Firefox, or Internet Explorer v 9.0 or higher.

To download and install the MediaCentral Ingest Profile application:

1. Click the Installers link and then click MediaCentral Ingest Profile Installer.
2. Download the installer and navigate to the following directory on the MediaCentral Ingest Engine.

C:\Program Files (x86)\Avid\Media Director Profile Installer

3. Follow the instructions in Avid MediaCentral Premiere Pro Connector ReadMe to install the application and create a default profile.

2

Using the MediaCentral Ingest Drop Utility

MediaCentral Ingest User Interface Variants

As of the current release, MediaCentral Ingest offers two user interface options:

- the classic MediaCentral UX based 'job & profile builder' UI.
- the new MediaCentral Cloud UX based Ingest app.

Job builder and profiles builder are MediaCentral Ingest's classic HTML user interface for running ingest jobs and for configuring ingest profiles.

Job Builder and Profile Builder run inside a small OS-native application called the Drop Utility that is available for Windows and Mac computers, and that allows the MediaCentral Ingest backend to have full access to local and network storage locations and system events such as drag & drop operations.

In addition to the classic Drop Utility based user interface, MediaCentral Ingest jobs can now be started using the new, MediaCentral Cloud UX based Ingest app.

The new Ingest App can be used in a browser-only (so called 'browser native') mode where no software installation is required, but in turn functionality is restricted to single file support due to security restrictions of the browser sandbox.

Alternatively, as of this release of MediaCentral Ingest you can also run the Ingest app from inside the Drop Utility. This requires installation of client software (which can easily be downloaded by pointing a browser to the MediaCentral Ingest backend) which allows the Ingest app to overcome browser sandbox limitations, enabling a similar level of functionality (such as folder and volume support or removable storage auto detection) as available previously in the classic job & profile builder user interface.



Note that currently, there is no Cloud UX version of the Profile Builder so Ingest administrators will still have to use the classic Profile Builder for setting up and maintaining profiles.

Running the Classic MediaCentral Ingest User Interface

The classic MediaCentral Ingest user interface features a MediaCentral UX style user experience with tabs and panes that are easy to customize. The application resides on a MediaCentral Ingest client system and displays the Job and Profile Builder UIs. For details, refer to the [“MediaCentral | Ingest Components” on page 19](#).

Typically, a user performs the following tasks to trigger an ingest operation:

- Start the Drop Utility application.
- Connect a drive, a share, or, insert media disks into an available media drive.
- Drag the associated volume from the media disk into the Job Builder interface, select a profile, and initiate a job. Note that the Drop Utility also has the ability of automatically starting a process when removable media is connected to the client.

Administrators use the Profile Builder to create profiles that direct the jobs and simplify the operations for the users who are creating the jobs.

What is a Volume?

A volume is a folder containing the AMA source material. It can be a folder on local or shared storage. It can also be a folder or camera media structure on an external card reader or camera. The following list describes where volumes appear on different devices:

- For P2 and Canon XF, navigate one level above the Contents folder
- For XDCAM disks, navigate to one level above the Clip folder
- For XDCAM EX, navigate to one level above the BPAV folder
- For QuickTime, navigate to the QuickTime folder that holds the QuickTime files

MediaCentral Ingest can recognize certain volume types and, by leveraging this capability, can traverse folder structures containing volumes. This means that there can be multiple volumes in a folder hierarchy, for example on a backup disk. MediaCentral Ingest will create jobs for each of the source material folders. Also, MediaCentral Ingest's rules system can be used to extract metadata from the folder hierarchy. This can be useful if the folder structure is organized by date, shooting site and camera team as production guidelines frequently require, or contains other relevant information.

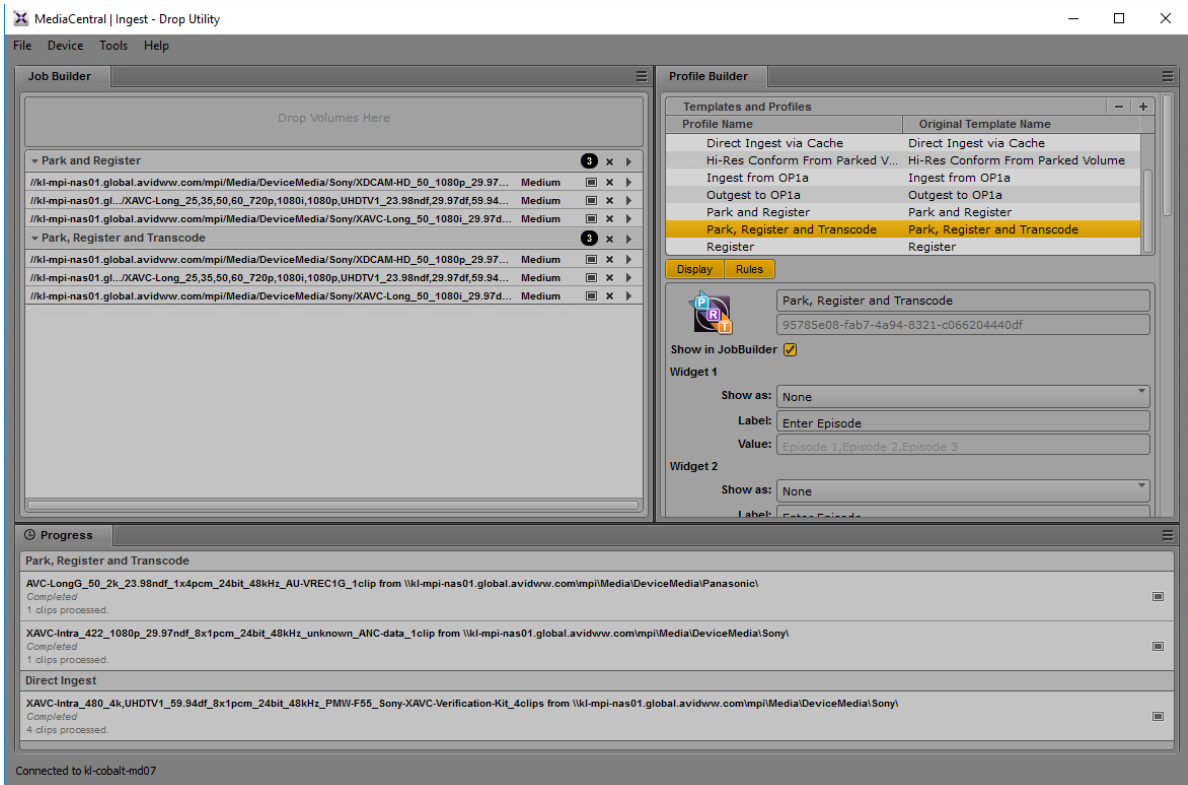
You can use MediaCentral Ingest's volume auto detection capabilities as follows:

- If you want the drop utility to perform automatic traversal of the volume hierarchy, hold the Shift key down while you drag the volume.
- If you do not press the Shift key while you drag the volume, MediaCentral Ingest will process exactly the folder you selected, and automatic traversal will not occur. This allows you to use MediaCentral Ingest with new AMA plugins that are not recognized automatically.

For additional information, see the *MediaCentral | Ingest Supported Volumes and Formats* document on the Avid Knowledge Base.

The Classic Media Central Ingest User Interface

The following illustration shows the main portions of the classic Media Central user interface: the Job Builder, Profile Builder and Progress panes. Depending on your needs, you can move the panes around. For example, if you are not creating profiles you can drag the entire Profile Builder pane behind the Job Builder pane.



The following section describes the different types of MediaCentral Ingest users and how they interact with the user interface.

Typical MediaCentral Ingest Users

MediaCentral Ingest users can be divided into three categories. Different users will focus on different parts of the user interface.



Starting at Media Director v1.1 there are some basic user management functions that allow you to prevent operators from having access to the profiles in the Profile Builder. See “Setting the Login Behavior” on page 46.

Operators

Operators are staff members responsible for the actual ingest of camera media. They need to be able to process media quickly and in an efficient, simple-to-use manner. An operator may not necessarily be a subject expert on camera codecs, formats, or how the workgroup environment is set up. They may be handling many tasks at once throughout the work day. They may be less experienced staff or their focus may normally be in other parts of creative process.

An operator typically uses the Job Builder and Progress panes of the MediaCentral Ingest interface. Alternatively, with this release, they may use the MediaCentral Cloud UX Ingest App.

Administrators

Administrators are often responsible for setting up and maintaining the workgroup environment. They may be responsible for directing or helping direct facility-wide asset management pipelines. An administrator needs easy-to-use, yet sophisticated tools to fine-tune the environment and make sure media is accurately processed. Administrators are often subject experts on camera codecs, formats, and how they line up against project needs.

An administrator uses the Profile Builder pane of the MediaCentral Ingest interface.

Combined Operator and Administrator

Depending on the site, some staff members are responsible for both the actual ingest of camera media and maintaining the workgroup environment. They need to be able to process media quickly and in an efficient, simple-to-use manner. They are usually subject experts on camera codecs, formats, how they line up against project needs, and how the workgroup environment is set up. This individual typically handles many different tasks throughout the work day and must be able to efficiently handle the addition of new workflows.

The combined operator and administrator uses all three panes of the MediaCentral Ingest interface. See “Setting the Login Behavior” on page 46.

Accessing the MediaCentral Ingest Installers

Pointing a web browser to the URL of your MediaCentral Ingest backend takes you to the MediaCentral Ingest web interface. The following are available from the landing page:

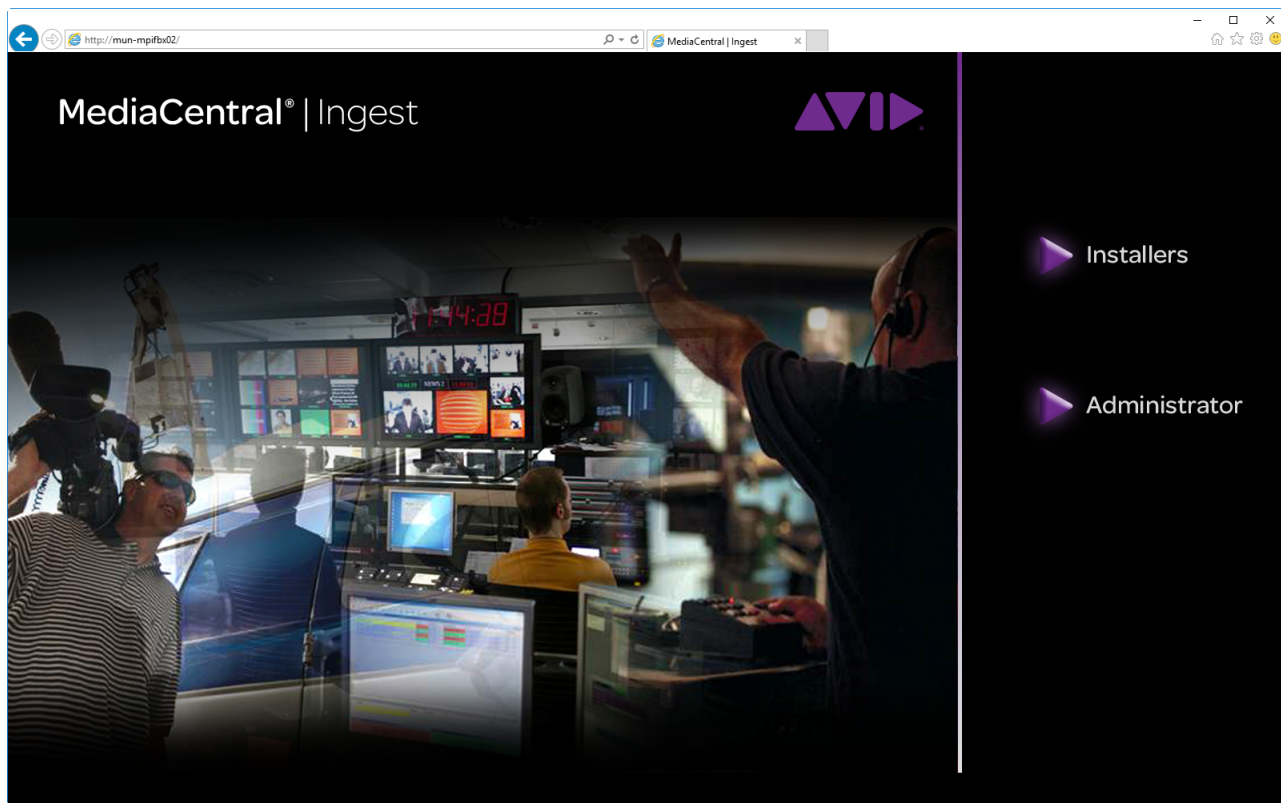
- The Installers link brings you to a page that contains the following:
 - Drop Utility installers for Windows and Mac OS X.
 - Clip Tools service installers for Windows.
 - The MediaCentral Ingest Profile installer that contains support for the MediaCentral Premiere Pro Connector. For additional information, see [“Support for Adobe Premiere Pro” on page 32](#).
 - A link to download supported AMA plug-ins on the Avid Knowledge Base.
 - A link to the MediaCentral Ingest documentation on the Avid Knowledge Base.
- The Administrator link brings you to the MediaCentral Ingest Engine System Administrator. For additional information, see [“Modifying the MediaCentral | Ingest Engine Configuration” on page 145](#).
- The Job Status link displays the Progress tab of the Drop Utility application.

To access the MediaCentral Ingest web interface:

1. Open a browser and navigate to following URL:

http://<engine name>

The following illustration shows the web interface.



 *To access the Installers web page on Windows use Chrome, Mozilla Firefox, or Internet Explorer v 9.0 or higher. On Mac OS X, use Mozilla Firefox.*

 *The MediaCentral Ingest Engine System Administrator interface is not supported on Mac OS X. It requires Internet Explorer.*

To install the Drop Utility:

1. Click the Installers link and then click MediaCentral Ingest Drop Utility for Windows or Mac OS installers.
2. Download and start the installer.
3. Follow the system prompts to complete the installation.
4. Start the Drop Utility application and configure it as described in the following section.

Configuring the Drop Utility Application

The first time you start the Drop Utility application, you must configure the connection to the desired backend which can either be a MediaCentral Ingest Engine (as a result, the classic user interface becomes available), or a Cloud UX infrastructure (with the Ingest app UI look and feel). The next time you open the application it automatically connects to the last selected backend that you have configured. You can also switch between different MediaCentral Ingest Engines or Cloud UX backends. See [“Viewing or Changing the Drop Utility Connection” on page 45](#).

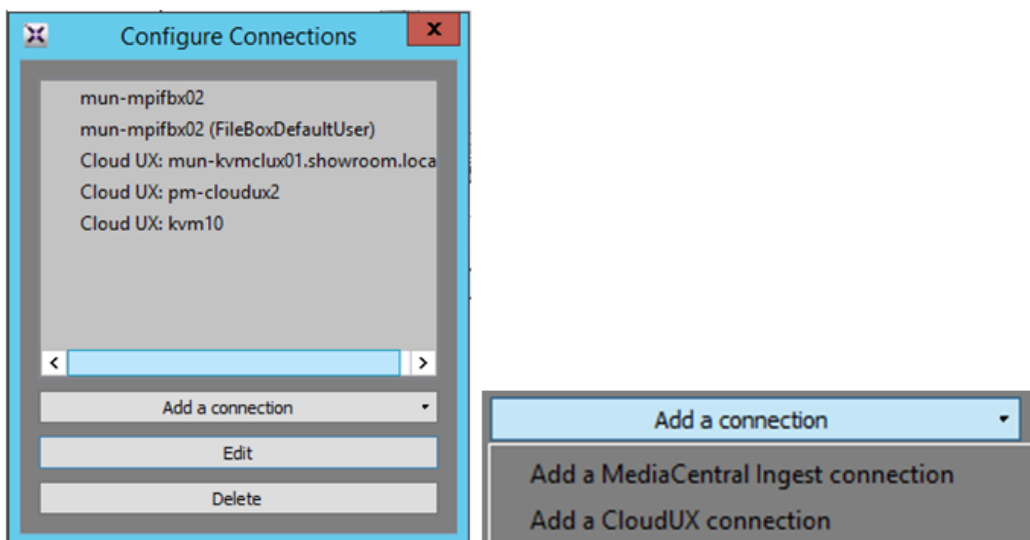
To configure the Drop Utility backend:

1. Double-click the MediaCentral Ingest application icon.

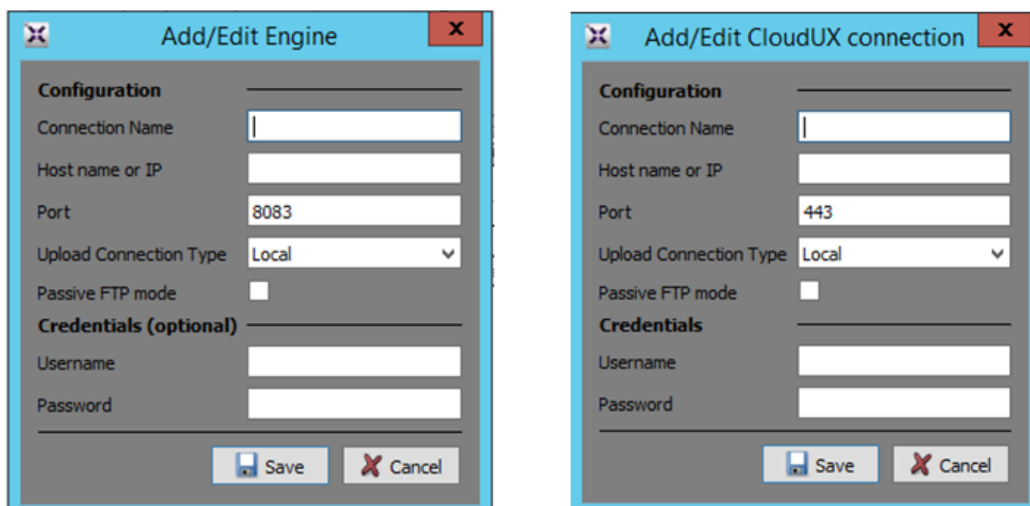
If the Drop Utility interface opens. If it displays the Job Builder or the Job Builder and Profile Builder tabs or the Ingest app, it means that the application recalls the previous MediaCentral Ingest Engine or the Cloud UX backend that it was connected to. In this case you can do one of the following:

- View details about the engine or the Cloud UX backend or change the connection to another MediaCentral Ingest Engine or Cloud UX backend. See [“Viewing or Changing the Drop Utility Connection” on page 45](#).
- Set the login behavior so that users that don't need the Profile Builder tab will not see it. See [“Setting the Login Behavior” on page 46](#).
- Rearrange the panes on the display to your liking. See [“Rearranging the MediaCentral Panes in the Classic MediaCentral Ingest UI” on page 49](#).

2. To add, change or remove connections you can use the 'Configure Connections' dialog which is shown in the following illustration.



- When adding a connection, you get to choose between adding a MediaCentral Ingest or Cloud UX connection:



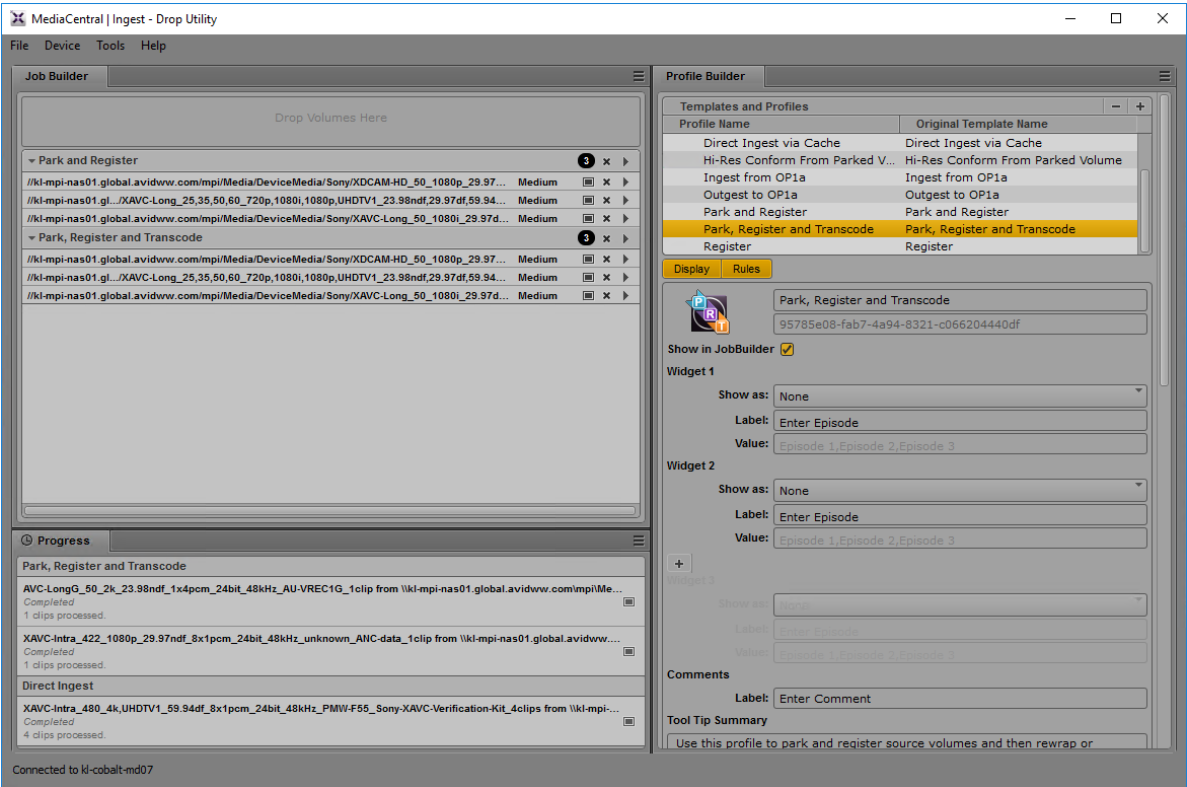
In the 'Add/Edit Engine' or 'Add/Edit CloudUX Connection' dialog do the following:

- a. Enter values as shown in the following table:

Option	Description
Connection Name	The name you want to use to identify the MediaCentral Ingest Engine or the Cloud UX backend.
Host name or IP	The IP address or host name of the MediaCentral Ingest Engine or the CloudUX backend.
Host port	Usually port 8083 for the MediaCentral Ingest backend and 443 (HTTPS) for the MediaCentral Cloud UX backend.
Upload Connection Type	Three options that define the connection type for the parking storage: Local, Remote, and Internet. See “Configuring the Remote Parking Storage Base Path” on page 77 . When connected to the CloudUX backend, it is only relevant for running the Ingest app in the Drop Utility.
Passive FTP Mode	Describes the mode in which the connection between FTP client and server is established (Active or Passive). When connected to the CloudUX backend, it is only relevant for running the Ingest app in the Drop Utility.
Credentials	For the MediaCentral Ingest backend, the Credentials section allows you to specify whether or not you view the Profile Builder along with the Job Builder. If you leave the credentials section blank, the default behavior is to show just the Job Builder. See “Setting the Login Behavior” on page 46. For the Cloud UX backend, you always have to specify full login credentials.

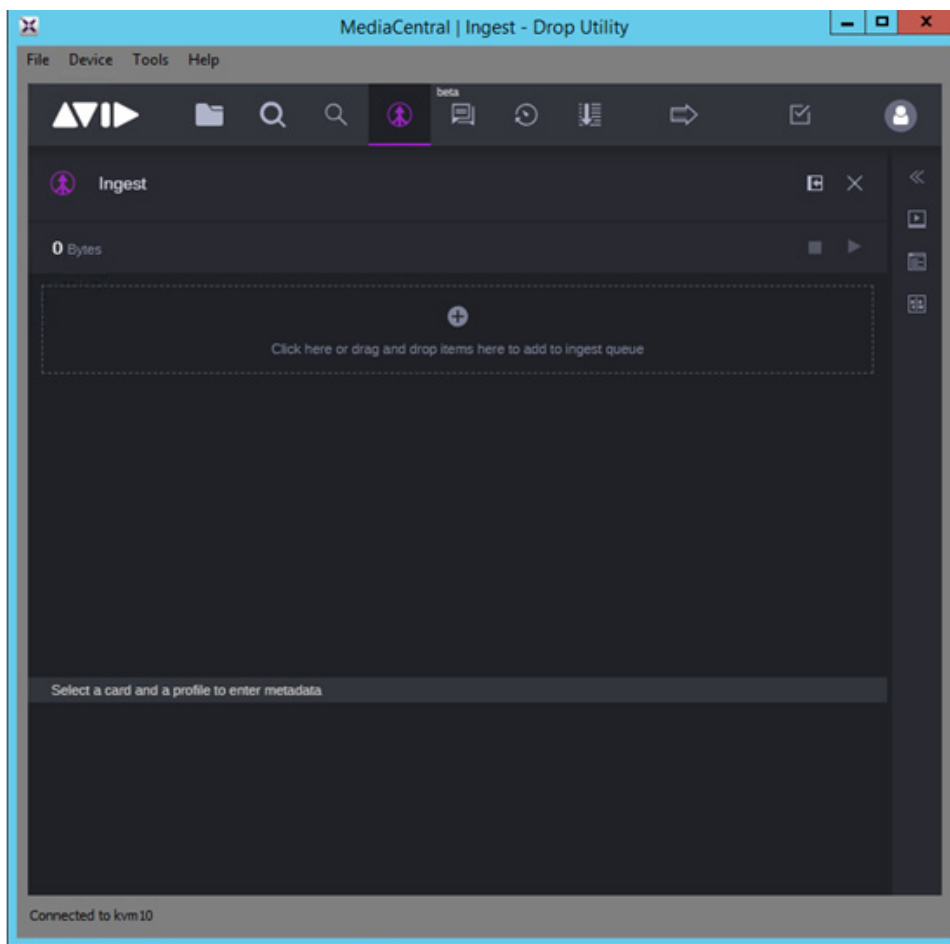
- b. Click Save.

Depending on the backend configured, the MediaCentral Ingest Drop Utility opens either with the classic UI as shown in the following illustration (when connected directly to the MediaCentral Ingest backend), or showing the Ingest app when connected to MediaCentral Cloud UX.



Note that the Drop Utility may open with a different layout and/or a different UI style depending on the server that you are connected to. For additional information, see [“Rearranging the MediaCentral Panes in the Classic MediaCentral Ingest UI” on page 49](#).

When configured to use the MediaCentral backend, the Ingest app opens as shown below:

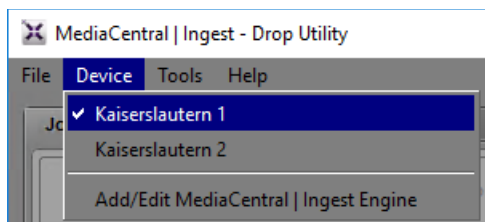


Viewing or Changing the Drop Utility Connection

The Drop Utility automatically opens the connection to the last MediaCentral Ingest Engine or the Cloud UX backend that was used. If you want to examine details about the backend or change the connection to another backend, use the following procedure.

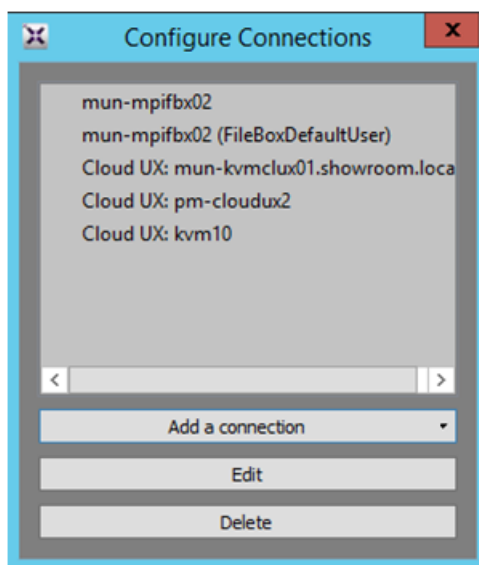
To view or change the MediaCentral Ingest Engine:

1. To check which MediaCentral Ingest Engine that you are connected to, click the Device menu. The connected backend is highlighted.



2. To view details about the connection or connect to a different engine, select Device > Configure Connections.

The Configure Connections dialog opens as shown in the following illustration.



3. Select a backend and click the associated buttons to add, edit, or delete the connection to the MediaCentral Ingest Engine or MediaCentral Cloud UX backend.

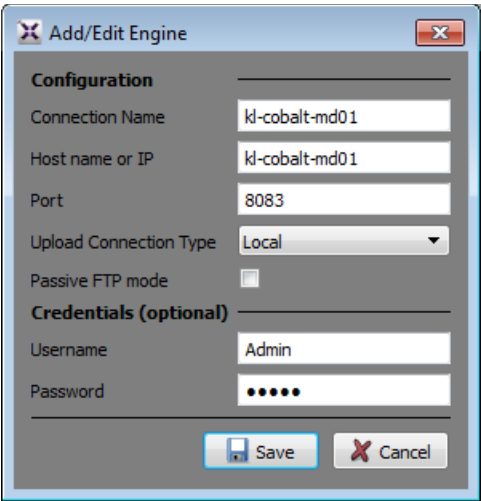
Setting the Login Behavior

The classic MediaCentral Ingest UI supports a basic login behavior that allows the Administrator to decide whether or not to display the Profile Builder. Most users only need the Job Builder to run jobs and it is a good idea to only display the Profile Builder when you need to create,

examine, or change a profile. It is easy to make a change in a profile and change or break the workflow. The classic MediaCentral Ingest interface only supports two functional users when logging in.

To change the classic login behavior:

1. Double-click the MediaCentral Ingest application icon.
 2. Login if needed. The user name is Admin and the password is admin. Contact Avid Customer Support if you need to change the defaults.
 3. Select Device > Add/Edit MediaCentral Ingest Engine.
 4. Select the MediaCentral Ingest Engine and click Edit.
- The system displays the Add/Edit Engine dialog.



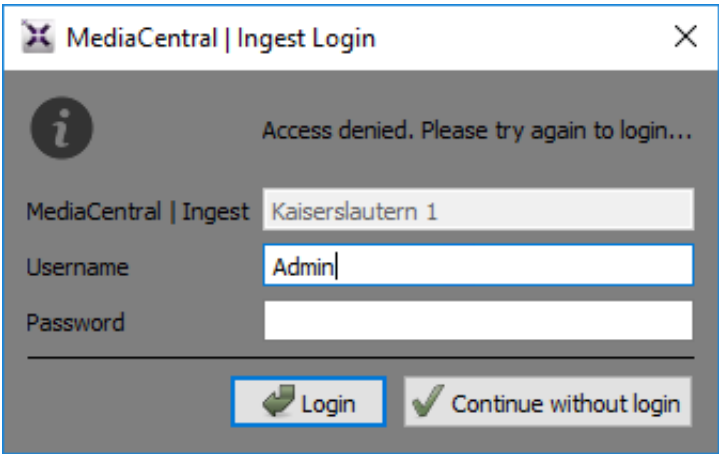
5. Modify the Credentials as shown in the following table. Note that the user names and passwords are case sensitive.

User name and Password Values	Result at Login
Leave both fields blank	User will login directly and see only the Job Builder.
User name: Admin Password: admin	User will login directly and see the Job Builder and the Profile Builder.
User name: Ingest Password: ingest	User will login directly and see only the Job Builder.

User name and Password Values	Result at Login
Fill in user name and leave password blank.	User has the option of entering the admin password or clicking the “Continue without Login” button to open the application with only the Job Builder.

- 6. Click Save.
- 7. Exit the application by clicking File > Exit. Note that simply clicking the close button in the application does not completely exit the application.
- 8. Double-click the MediaCentral Ingest application icon to test the new login behavior.

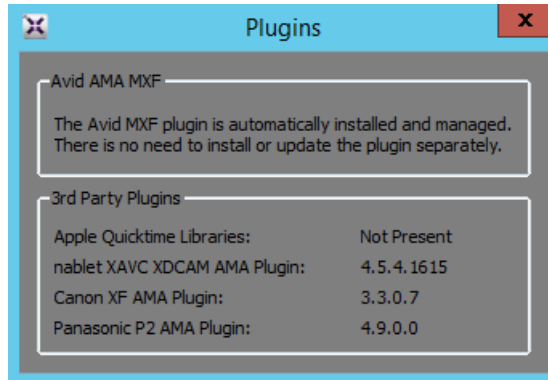
If you entered the Admin user name and left the password field blank, the system presents the MediaCentral Ingest Login screen as shown in the following illustration.



- 9. Do one of the following:
 - ▶ Enter the admin password and click Login. The system displays the Job Builder and Profile Builder.
 - ▶ Click Continue without login. The system displays only the Job Builder.

Viewing the Installed Plug-ins

You can view the list of plugins installed on the MediaCentral Ingest client. Select Help > Plugins. The following illustration shows the plugins installed on a sample client.

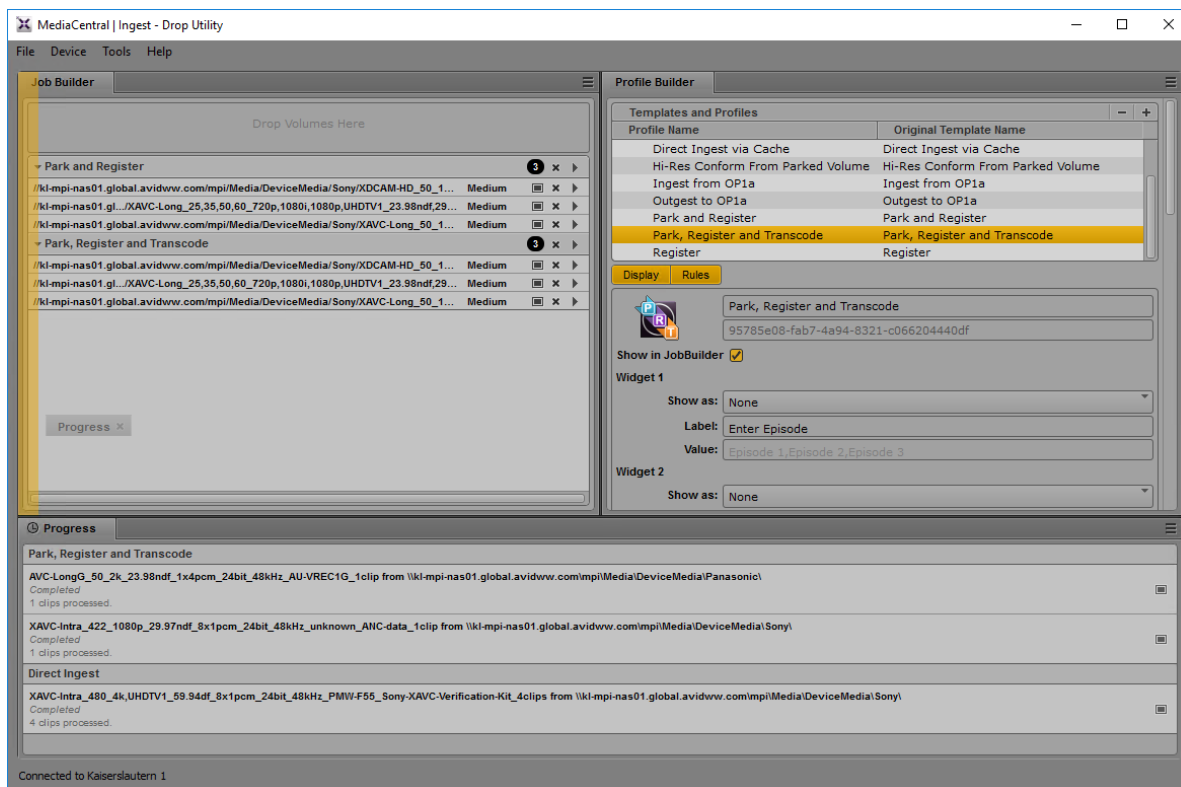


Rearranging the MediaCentral Panes in the Classic MediaCentral Ingest UI

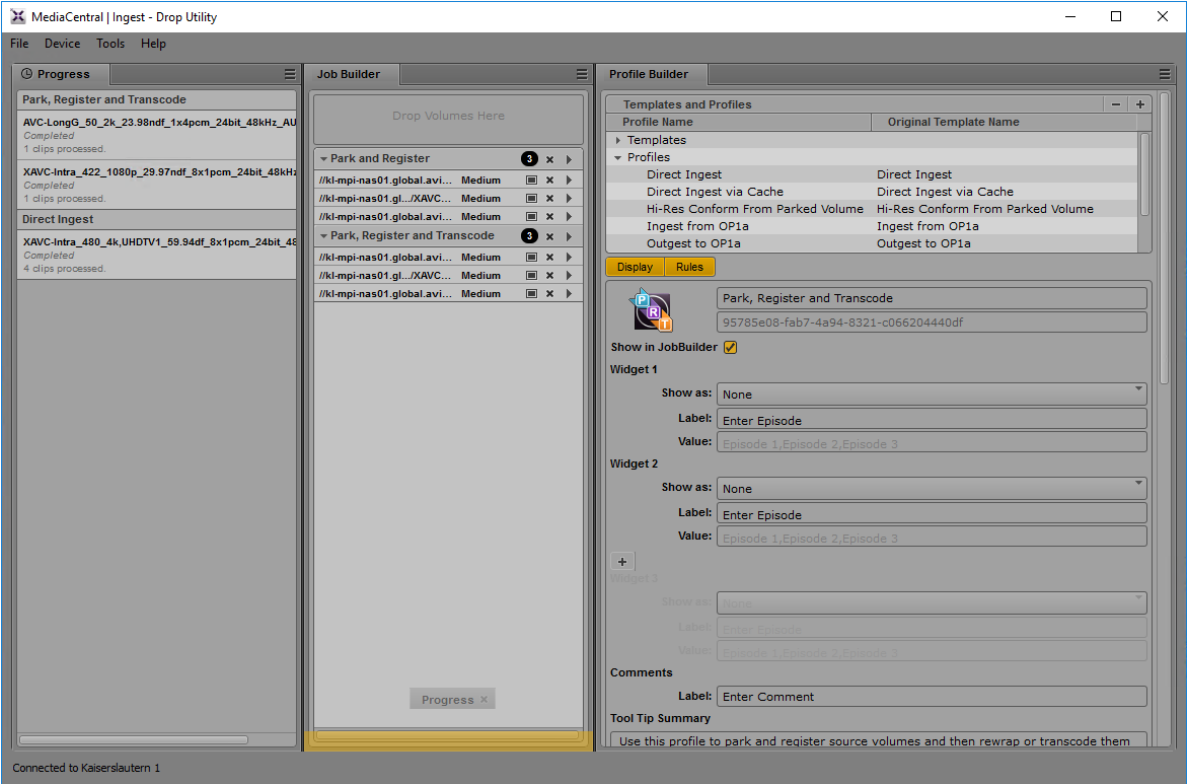
The classic MediaCentral UI panes displayed in the Drop Utility may be in different locations depending on the server you connect to. This section describes the basic method for rearranging the panes. In this example we want to move the Progress pane so that it is only under the Job Builder pane.

To rearrange the panes on the interface:

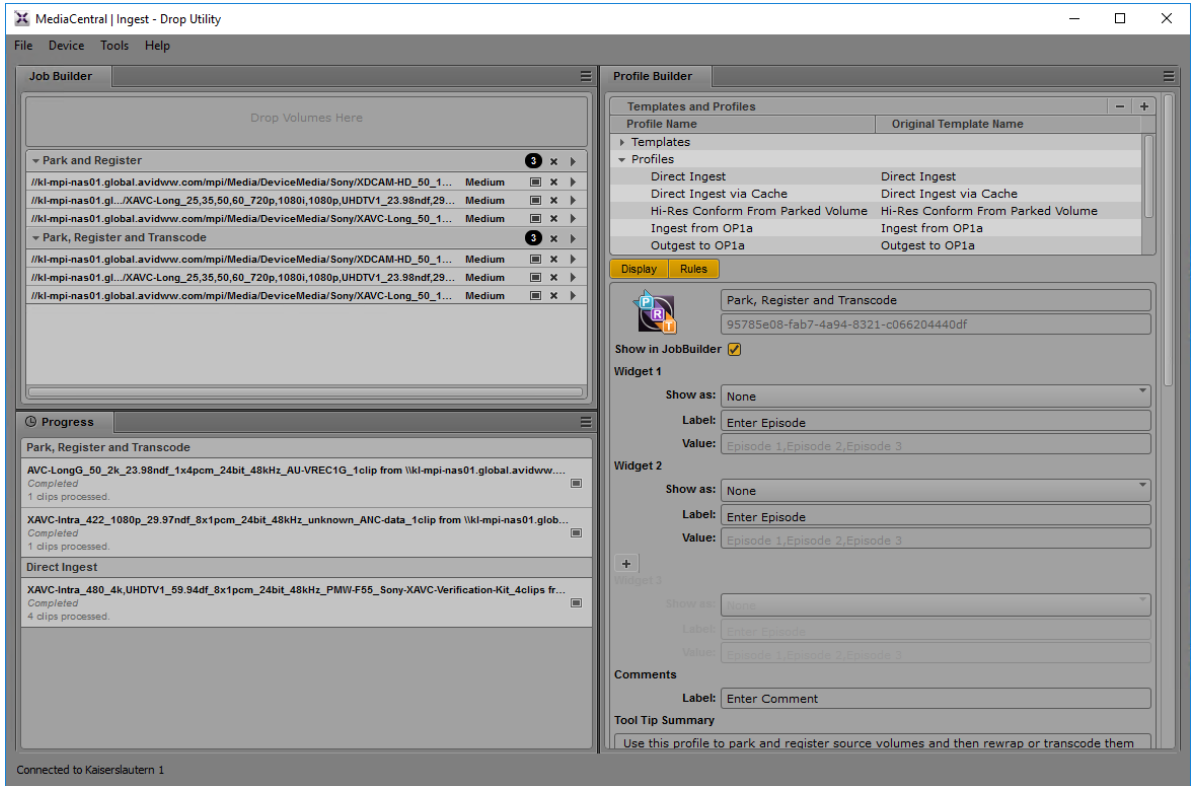
1. Click the Progress tab and drag the tab to the left side of the window until it shows a yellow highlight as shown in the following illustration.



2. Release the tab. The Progress pane moves to the left of the window.
3. Click the Progress tab and drag it to the bottom of the Job Builder tab as shown in the following illustration.



4. Release the tab. Now the Progress pane is below the Job Builder pane as shown in the following illustration. This is the format used in most of the examples in this guide.

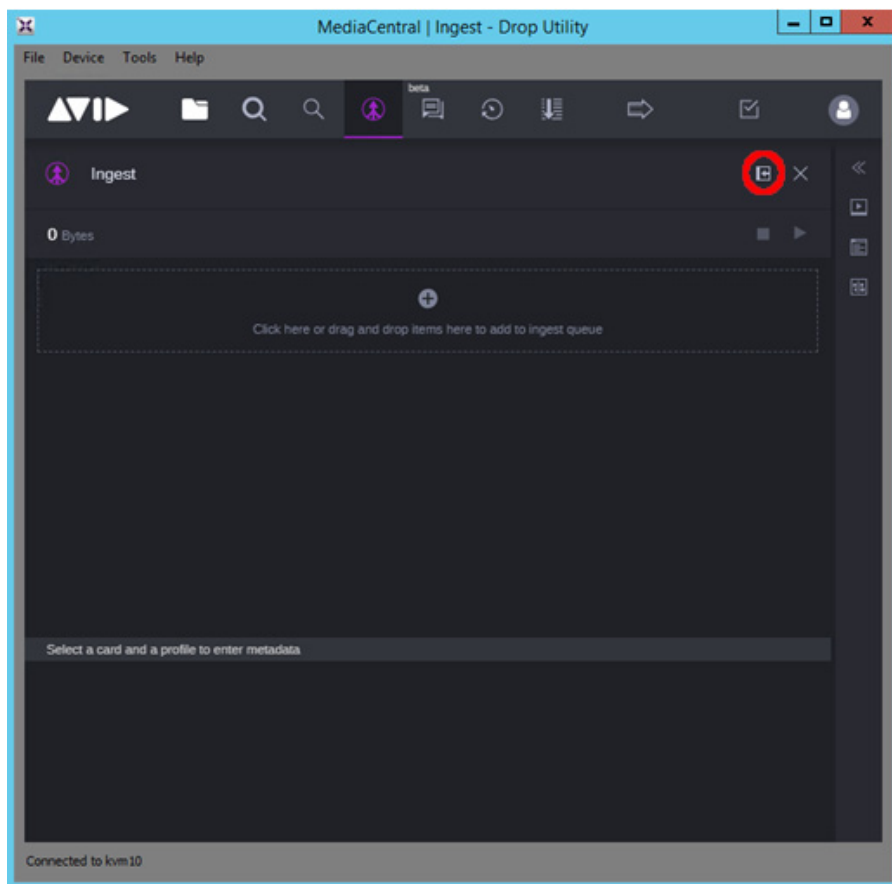


Docking Panes in the MediaCentral Ingest App

You can dock the MediaCentral Ingest app and open other apps, such as the Browse app, in the central panel. This can be useful, for example, for examining the results of an ingest operation.

To dock the Ingest app:

- ▶ Click the 'dock' button in the top right-hand corner of the app window (as highlighted in the graphic below).

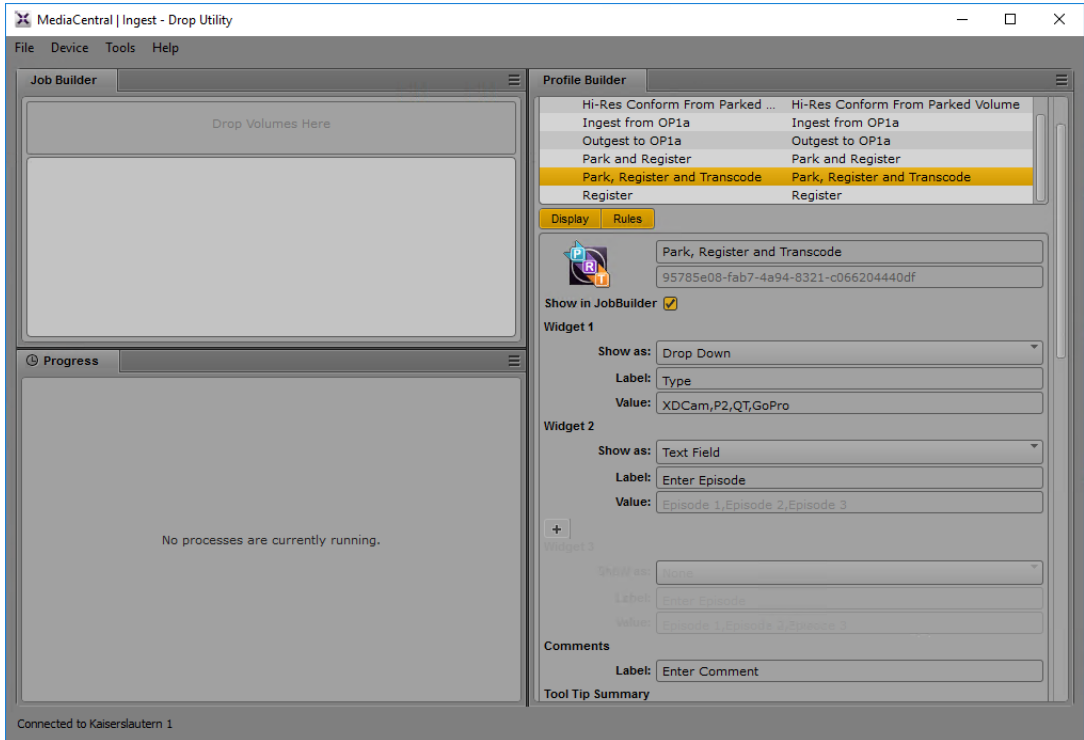


The Ingest app is now docked to the left side. Now, you can open another app in the central panel. For example, to open the Browse app, click the ‘folder’ button in the fast bar (top left).

For more information on docking apps, refer to the *MediaCentral | Cloud UX User’s Guide*.

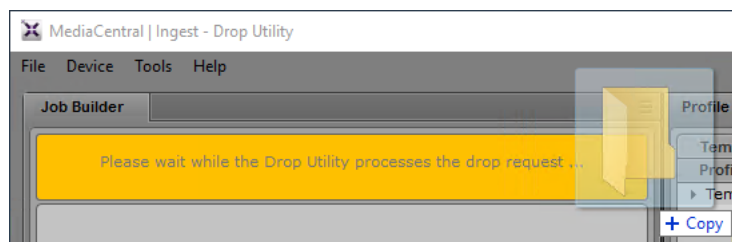
Using the Job Builder Pane

This section describes how to drag a volume onto the classic MediaCentral Ingest Job Builder pane and initiate a job. For a description on how to perform this task with the Ingest app, see the next chapter. The following illustration shows the Job Builder pane.



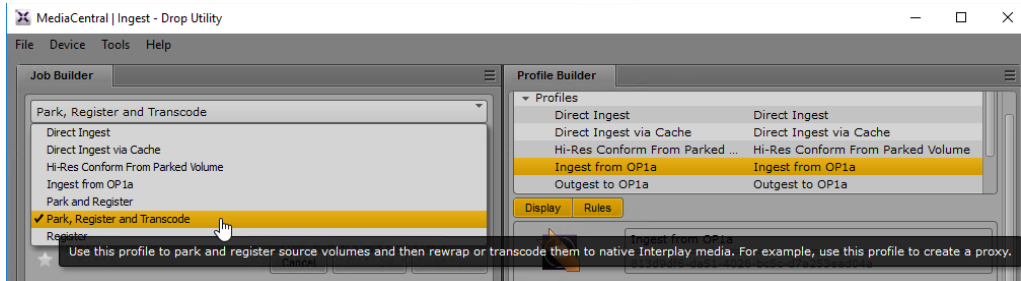
To start a new job:

1. Double-click the Drop Utility application icon to start the application.
2. Drag and drop a volume or folder onto the “Drop Volumes Here” area as shown in the following illustration. The system highlights the area as you drag a volume over it.

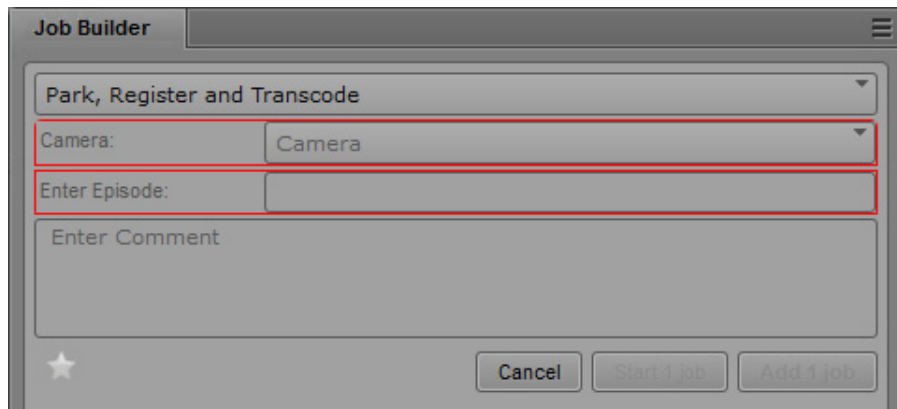


The Drop Utility expands and shows the first available Profile.

3. Click the Profile menu and select a Profile from the list of user defined profiles. For additional information on creating profiles, see [“Working with MediaCentral | Ingest Profiles”](#) on page 111.

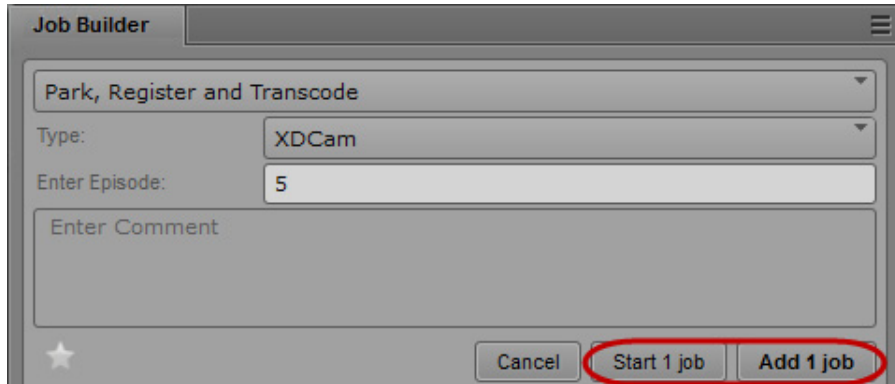


The system displays the job options for the profile as shown in the following illustration.



Note that sections of the job options that require input from the user are highlighted in red.

4. Fill in any fields as necessary. This example has a “Type” popup menu that allows you to identify the source format. This value will be used during the job to create a folder structure. It also has an Enter Episode text field that allows you to enter text. The following illustration shows XDCAM selected and a value of 5 entered for Episode.

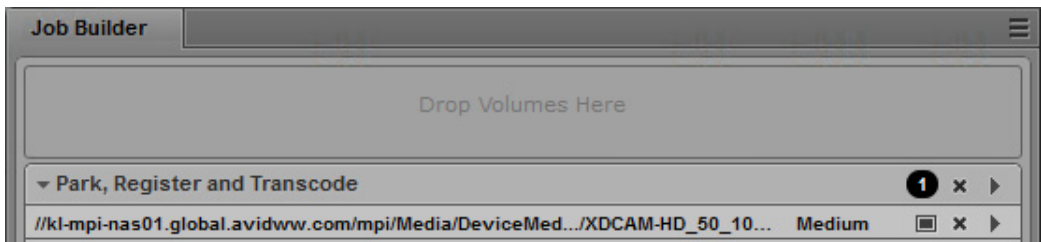


5. Click the Add 1 Job or Start 1 Job button. In this example, there is just one job to add.

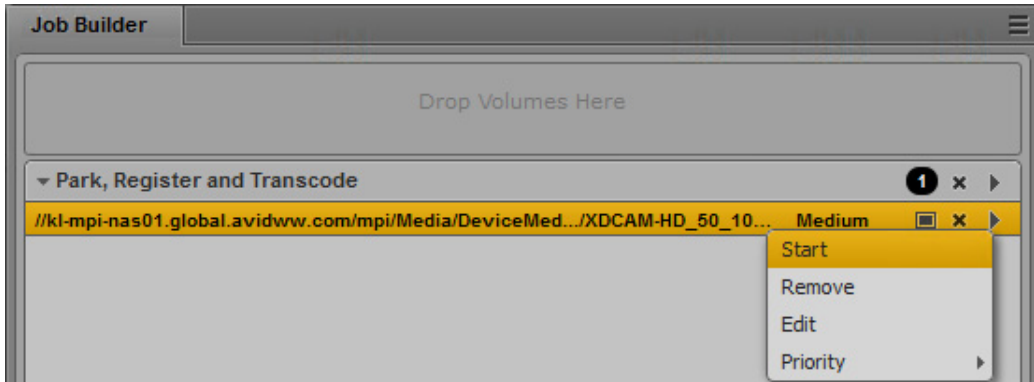


The Add Job/Start Job buttons are disabled if the profile specifies job options but no data has been entered. In this case, the Add Job button is disabled until the fields contain data.

The system displays the job as ready to be processed. In this example, one job is ready to be processed. The black “badge” indicates the number of jobs.



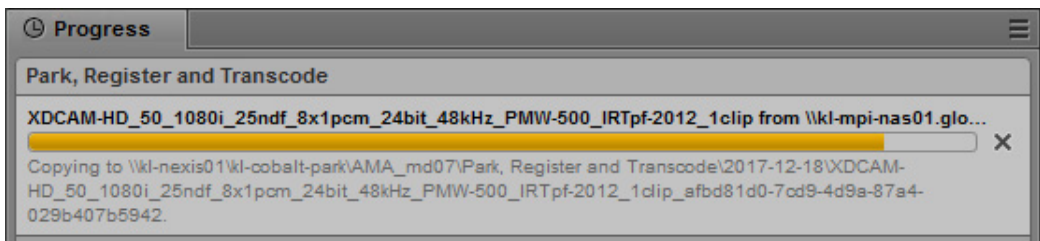
6. Right-click the job under the profile name and select Start. Alternatively, you can click the '>' button on the job to start this job alone, or use the '>' button on the profile header to start all jobs. In a similar way, the 'x' button removes a single or all jobs from within the profile.



 You can also edit the job parameters or delete the job by right-clicking on the job. You can also perform multi-select using shift and control keys.

 (Option) To start or delete all jobs under a specific profile, right-click the black badge that shows the number of jobs for a specific profile, and choose to “Start all” or “Delete all” jobs.

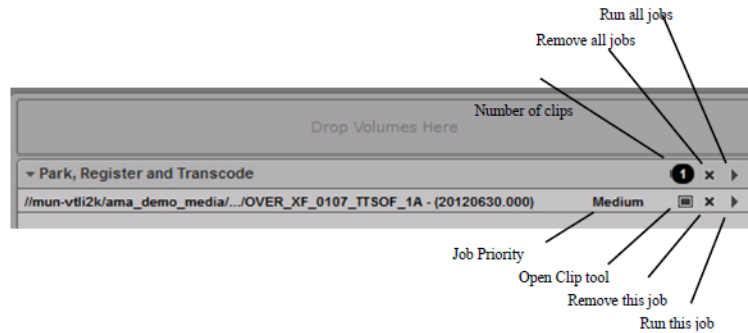
The system removes the job from the Job Builder pane and adds it to the Progress pane. The following illustration shows the job in progress.



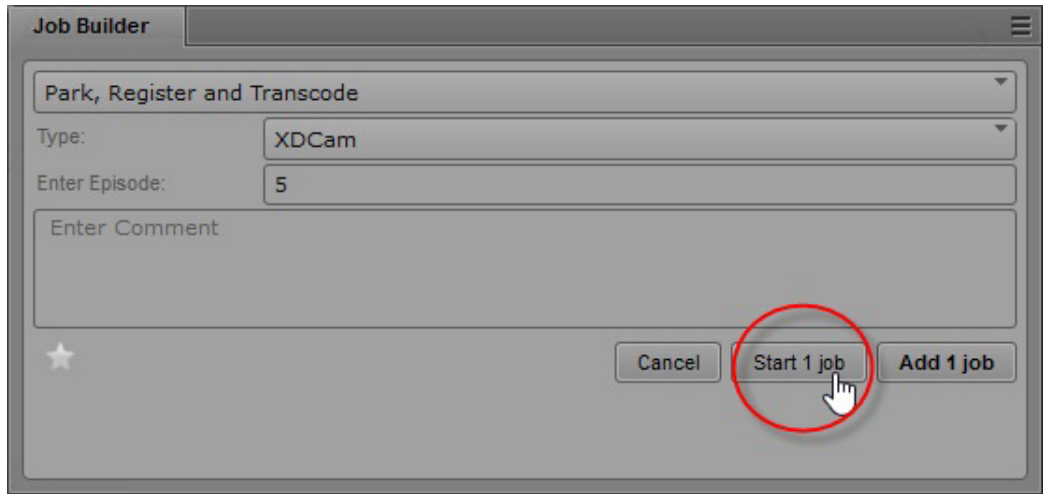
MediaCentral Ingest displays status messages as it processes the job. If the progress pane displays any errors, click the Details button for additional information.

Controlling MediaCentral Ingest Jobs in the Classic MediaCentral Ingest UI

The following illustration shows the different user interface elements for controlling individual and batch jobs in the job staging area.



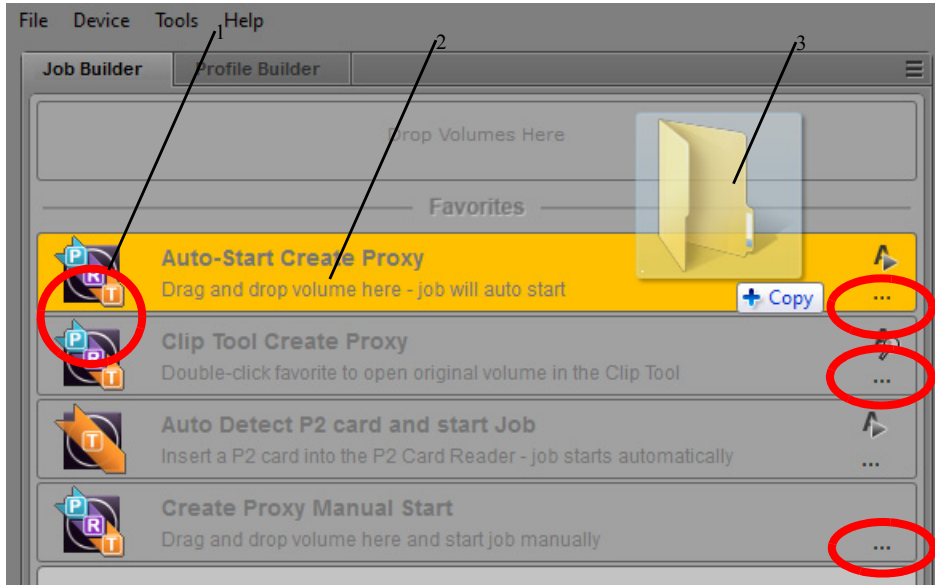
You can also start a job as soon as you drag it into the Job Builder using the Start x Job button, where x is the number of jobs in the Job Builder as shown in the following illustration.



The job skips the staging process and moves immediately to the Progress pane.

Creating Favorites in the Classic MediaCentral Ingest UI

You can create favorites to make it easier for users to identify specific profiles that they might use on a regular basis. Media Director v1.5 had a limit of 5 favorites but for Media Director v1.6 and higher there is no upper limit. The following illustration shows the four types of favorites that you can create.



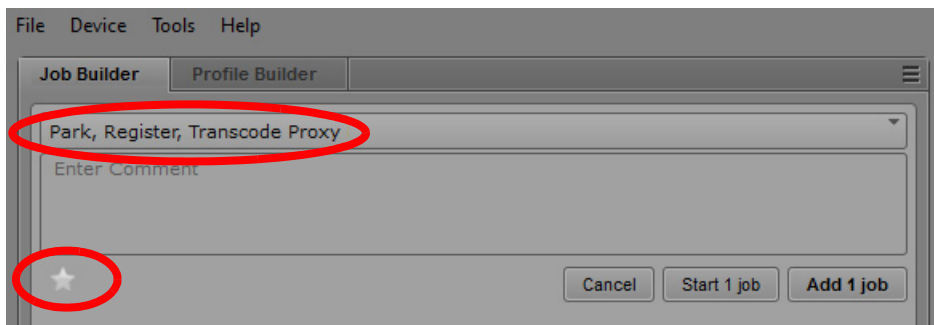
Option	Description
1	Icon associated with the profile. By default, this is the Template icon that the profile was built from. You can also supply your own icon for a Favorite. Note that the icon should be sized to 48x48 pixels since MediaCentral Ingest will not resize them.
2	Name and descriptive text. You can modify both fields when you create or edit the Favorite.
3	There are three ways to automatically launch the profile associated with a favorite: • Drag and drop a volume onto the favorite as shown in the illustration. This creates a job using the files in that specific volume and works for all favorites. • Double-click a favorite created using the “Auto Open in Clip Tools” option. This creates a job with the volume that was originally used to create the favorite. For example, if the camera crew always puts their P2 card in the same card reader, double-clicking the favorite will launch a job with the current media on the card currently in the reader. • Set the job to automatically start when the user inserts a media card into a specific removeable storage device. In this case, just supply the drive letter of the removeable storage device in the URL section. For example, if the removable storage device is on the F drive, supply F:/ for the URL string.

Option	Description
4	Auto-start Jobs icon: This type of favorite automatically starts the associated job when the operator drags and drops a volume onto the Favorite.  <i>The profile used to create this favorite should not require any user input since this will inhibit the auto start feature.</i>
5	Auto-open in Clip Tools icon: This type of favorite will automatically open the Clip Tool when the operator drags and drops a volume onto the favorite or double-clicks the favorite. The Clip Tool allows the operator to select the clips that will be processed. See “Using the MediaCentral Ingest Clip Tools” on page 94. If you double-click a favorite created with this option, the job automatically starts using the volume associated with the original volume that was used to create the favorite.
6	The is an example of a job that auto detects when a user has inserted media into a removable drive. You can set up the profile to either start the job or open the volume in the Clip Tools. This feature is supported in Media Director 1.6 and higher.
7	The fourth type of favorite (manual start) does not have an associated icon. After you drag the volume onto the favorite, the job opens as usual. Then you can respond to any required fields and start the job manually. The above illustration identifies the ellipses that are present for each Favorite. Clicking the ellipses opens the Edit Favorites dialog box. This allows you to edit or delete the favorite.

To create a favorite:

1. Drag and drop a volume on the Job Builder area.

The job opens and displays a white star indicating that there is no favorite associated with the job. Note that when a favorite is associated with a job, the star is gold.



2. Select the Profile that you want to use for this favorite from the pulldown menu. This example uses a profile named Park, Register, Transcode Proxy.

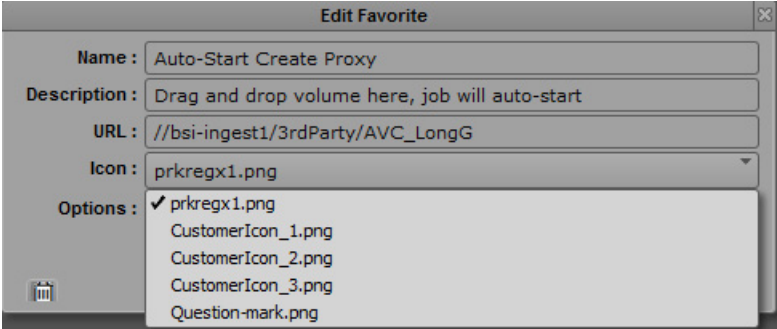


If you are creating a job that will auto-start, select a profile that does not require any user input.

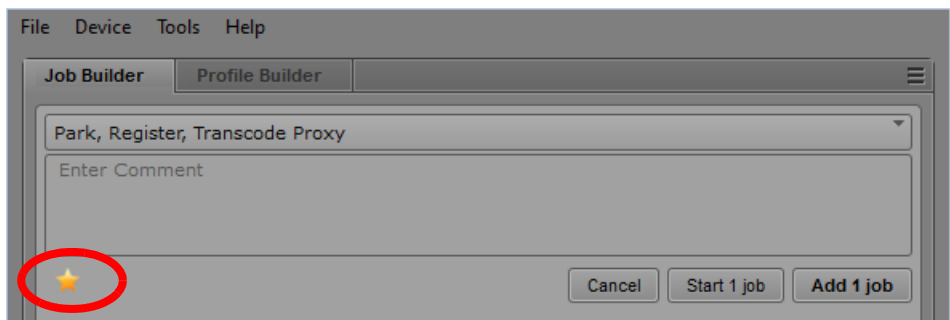
3. Click the white star to open the Edit Favorite dialog box.

Option	Description
1	Name: Enter a descriptive name for the favorite.
2	Description: Provide instructions on how to use the favorite.
3	URL: The location of the volume originally used to create the favorite. If you double-click a favorites created with the “Auto Open in Clip Tools” option, MediaCentral Ingest creates a job with the volume that was originally used to create the favorite. For example, if the camera crew always puts their P2 card in the same card reader, double-clicking the favorite will launch a job with the current media on the card. Media Director v1.6 and higher: If you supply a Drive letter corresponding to a removeable drive, MediaCentral Ingest can automatically start the job when you insert a media card into the drive. The following illustration shows an example where a P2 card reader is on the F:/ drive.

Note that you can set up an auto-detect profile to either auto-start a job or open the volume in the Clip Tools depending on which check box you select.

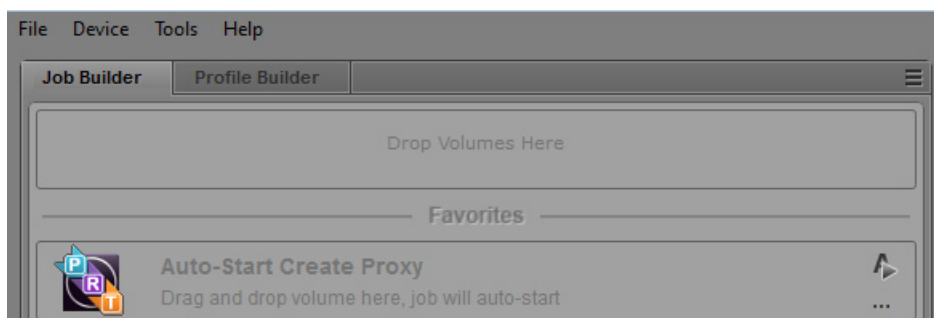
Option	Description
4	Icon: This is the icon that will be displayed for the favorite on the client's system. This can be one of two graphics: - By default the system uses the icon associated with the profile. - You can create and select your own custom icons. You can create your own, custom icons, 48x48 pixel in size. Store the icons on the MediaCentral Ingest server in the following folder: C:\Program Files\Avid\Media Director Central Runtime\site\profiletypeicons The following illustration shows the default icon name (prkregx1.png in this example) and several custom icons. 
5	Auto Start Job: The job will automatically start when you drag a volume onto the favorite.  <i>If you are creating a job that will auto-start, select a profile that does not require any user input.</i> Auto Open in Clip Tools: There are two ways to start a job created with this option: - Drag and drop a volume onto the favorite as shown in the illustration. This creates a job using the files in that specific volume. - Double-click the favorite. This creates a job with the volume that was originally used to create the favorite. For example, if the camera crew always puts their P2 card in the same card reader, double-clicking the favorite will launch a job with the current media on the card currently in the reader.
6	Trash can icon: Click this icon to delete the favorite.
7	Save or Cancel buttons: Allows you to save changes or cancel the operation.

- Click the Save button to save the changes. The dialog box closes and the white star is replaced with a gold star. A gold star indicates that there is a favorite associated with the job as shown in the following illustration.



 You can click a gold star to open the Edit Favorites dialog box and make changes to or delete a favorite.

5. At this point the favorite is created. If the only reason to drag the job onto the Job Builder was to create the favorite, you can cancel the job. Otherwise, start or add the job as needed. The system displays the favorite in the Favorites list.



Setting the Queue Priority for a Job in the classic MediaCentral Ingest UI

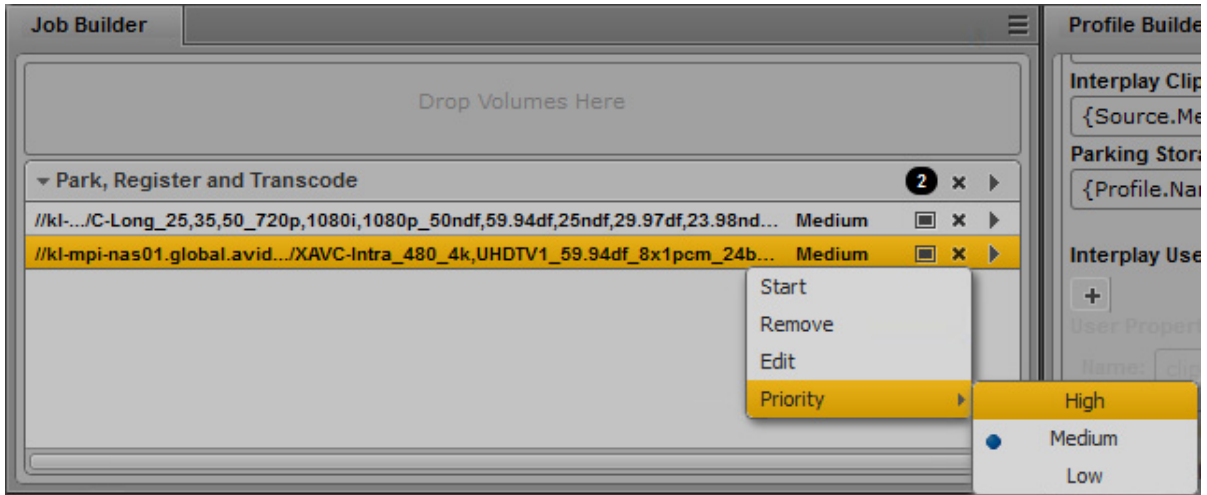
Starting at Media Director v1.1, you can assign a queue priority to a job. The following priorities are available:

- High - places the job at the top of the queue
- Medium - default
- Low - places the job at the bottom of the queue

Priorities are assigned per process step. MediaCentral Ingest assigns the priority independently for each step. Right-click the current priority level to change the priority as shown in the following illustration.

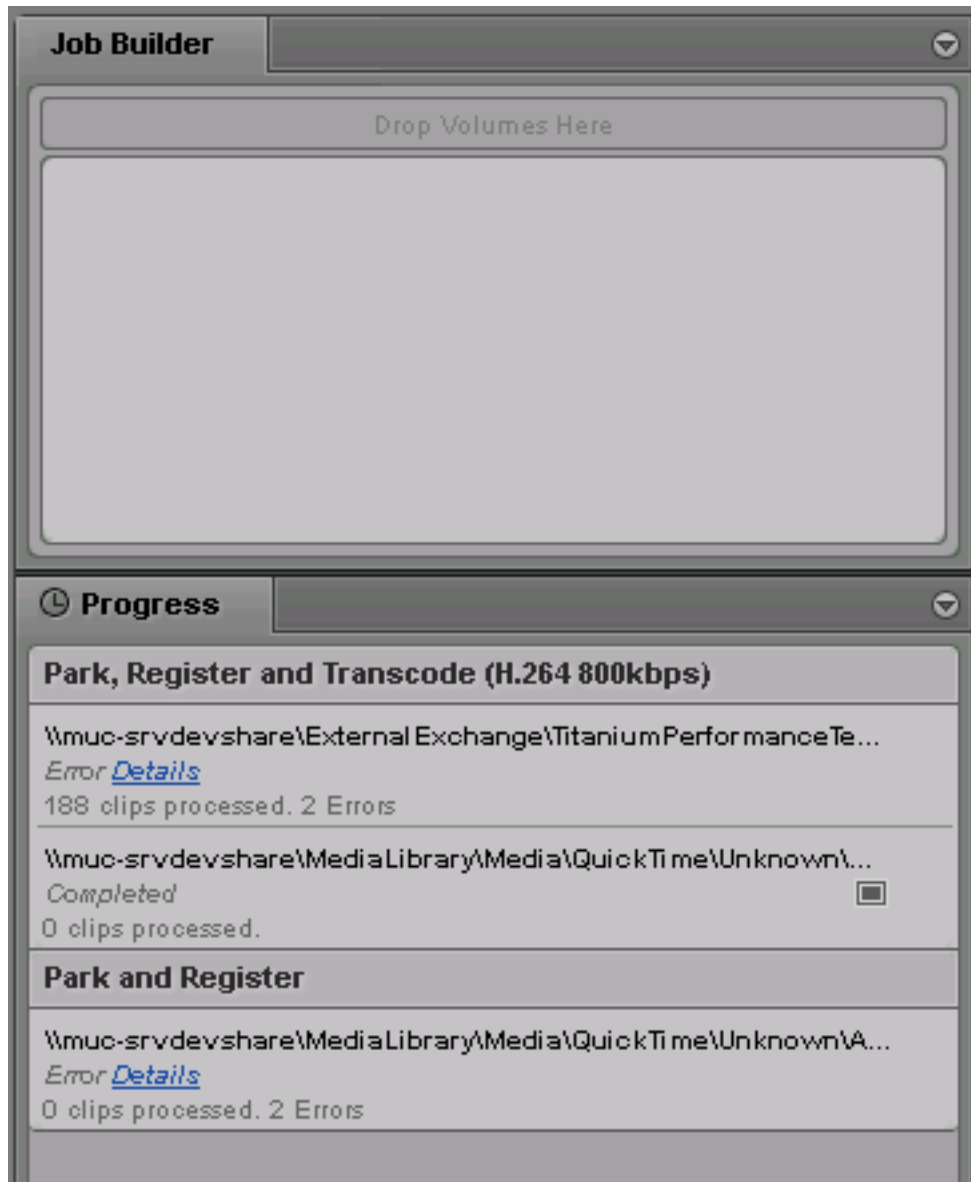


You can also multi-select jobs (using shift and control keys) across one or more profiles and right click the selection.



Using the Progress Pane in the classic MediaCentral Ingest UI

The following illustration shows the status pane after several jobs have been processed. MediaCentral Ingest groups the jobs by profile.



MediaCentral Ingest displays status messages as it processes the job. Click the Details button to see additional information about any errors that occurred while the job was processing.

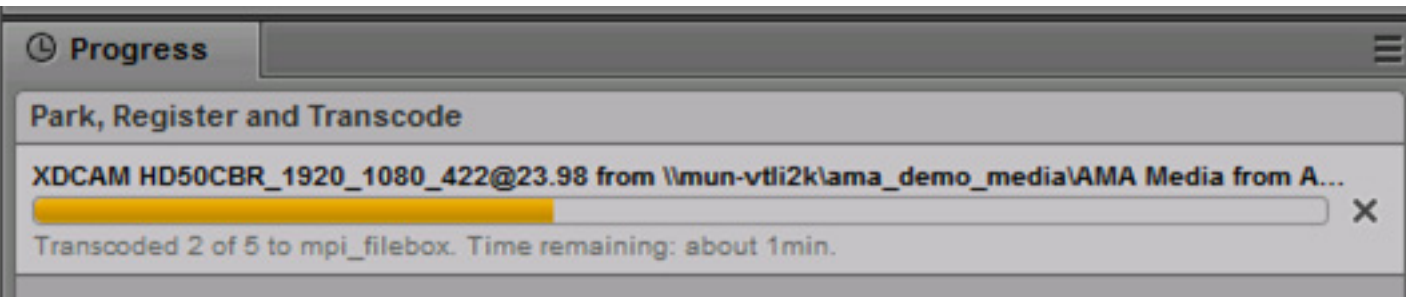
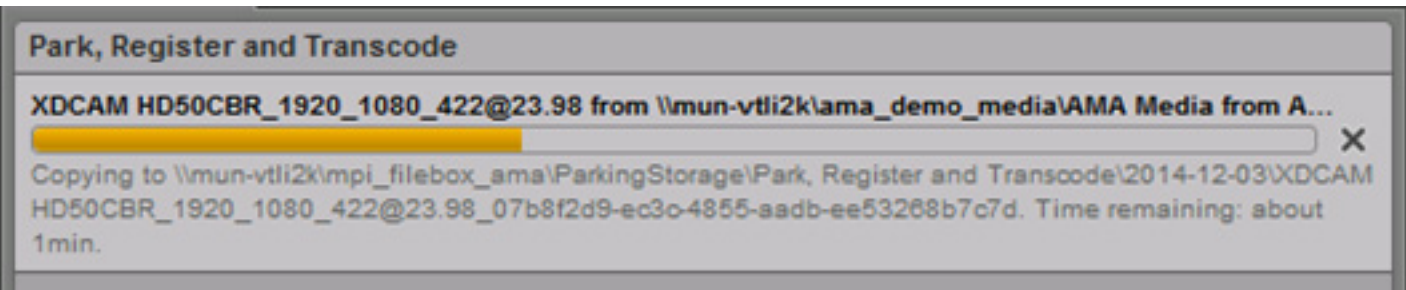
You can use the progress pane to cancel a job. Click on the cross to the right of the progress bar to cancel a running job.

Note that you can clear and filter the displayed jobs by profile. To do this, click on the triangle in the upper right of the profile pane. Use the pop-up menu to select the profiles that you want to show progress for.

The “Clear jobs” option allows you to clear finished jobs from the display. If you do not clear jobs manually, they will be cleared from the list automatically after four hours.

Displaying the Remaining Time for a Process

Starting in Media Director v1.1, the system displays the remaining time for the current process step. For example, while the system is copying files to the Parking location or performing a Transcode operation, the system shows an estimate of how long the Transcode operation will take. The following illustration show examples of a job being processed during two phases of a Park, Register, and Transcode job.



Using the Profile Builder Pane

MediaCentral Ingest includes a powerful profile builder that allows you to customize the way that operators interact with the Drop Utility. For more information, see [“Working with MediaCentral | Ingest Profiles”](#) on page 111.

Using a Watch Folder

MediaCentral Ingest supports watch folders for volumes and files. A Watch Service allows monitoring of a configured folder. The service will start a MediaCentral Ingest job whenever a new file or a new volume (folder) is added to the folder. The job will be submitted with a pre-configured Direct Ingest profile. The following is supported for Media Director v1.1 and higher:

- MediaCentral Ingest supports up to 10 watch folders.
- One watch service can monitor one folder hierarchy. For each watch service there is one profile that manages the content that is placed in the watch folder. For additional information, see [“Modifying the Watch Folder Parameters” on page 158](#).
- The following profiles can be used for a watch folder:
 - Park and Register
 - Park, Register, and Transcode
 - Direct Ingest
 - Direct Ingest via Cache
 - Ingest from Op1a

Note that not all AMA media is supported. See the *MediaCentral | Ingest Supported Volumes and Formats* document on the Avid Knowledge Base.

The following defaults apply to the watch folder:

- Only files with the following suffixes will start a new job: .mov, .mp4, .mpeg, .mpg and .mxf.
- All folders will start a new job. Folders are considered to be volumes.

A UNC share is automatically created during installation that can be used as a drop folder. The default watch folder path is as follows:

```
\\<MediaCentral Ingest hostname>\MediaAssetManager\Workspace\WatchFolder\
WatchService_1\WatchFolder
```

You can modify the Watch folder location and change the profile associated with the Watch folder. For additional information, see [“Modifying the Watch Folder Parameters” on page 158](#).

By default, the assets representing the ingested media will be found in the following MediaCentral Production Managment database folder:

```
Incoming Media\From MediaDirector <MD host name>\Direct Ingest\yyyy-mm-dd
```

You can modify the profile to store the assets in a different folder. The following illustration shows an example location.



To use the Watch Folder:

1. Drag and drop a volume onto the following folder:

\\<MediaCentral Ingest host name>\MediaAssetManager\Workspace\WatchFolder\WatchService_1\WatchFolder

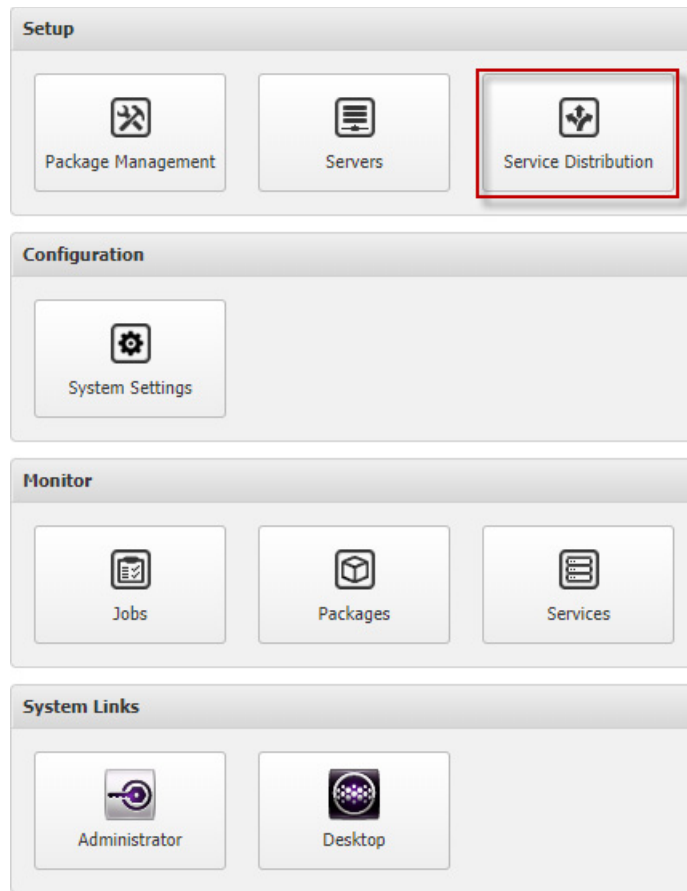
If the volume contains supported AMA media, the selected profile will start at the next polling interval. The default polling interval is 5 seconds. You can modify the value as described in [“Modifying the Watch Folder Parameters” on page 158](#).

2. After the job completes, check the following folder in the MediaCentral Production database for the new clips:

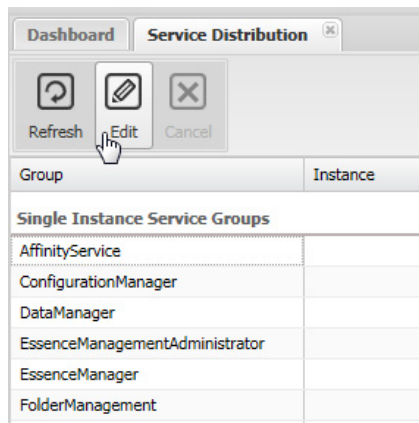
Incoming Media\From MediaDirector <MD host name>\Direct Ingest\yyyy-mm-dd

To create additional Watch Folders:

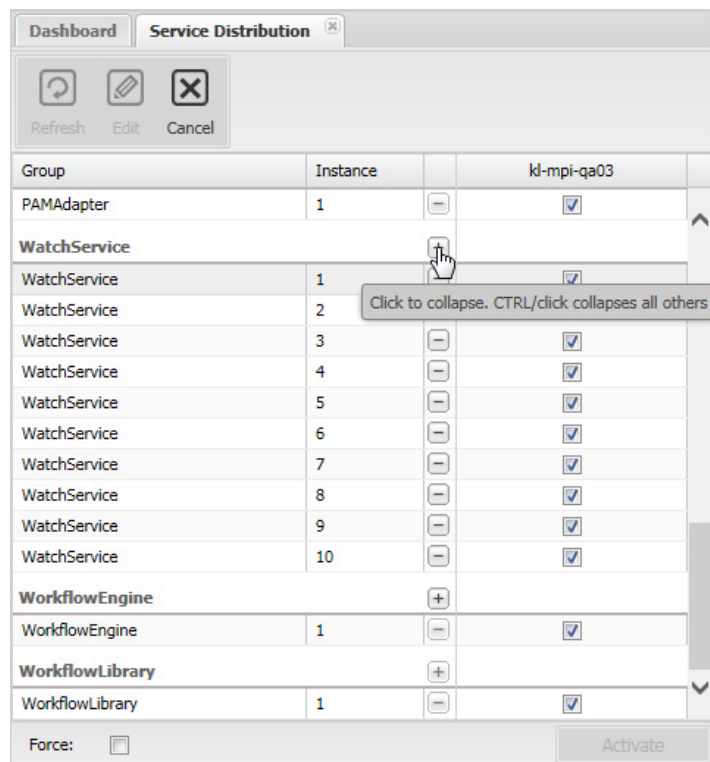
1. Access the MediaCentral Ingest Administration Overview, as described in [“Accessing the MediaCentral | Ingest Administration Overview” on page 146](#).
2. Open the Control Center link from the overview screen. Log in with the credentials of the service user that you specified during the installation.
3. Open the Service Distribution link.



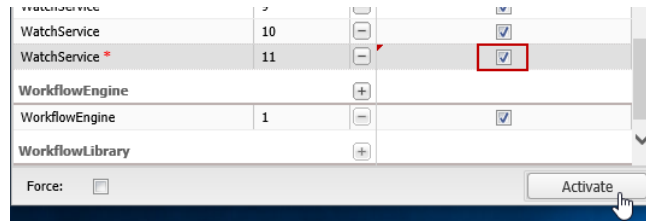
4. Open the Edit mode.



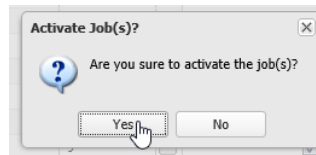
5. Scroll down to the WatchService Group and click the + sign.



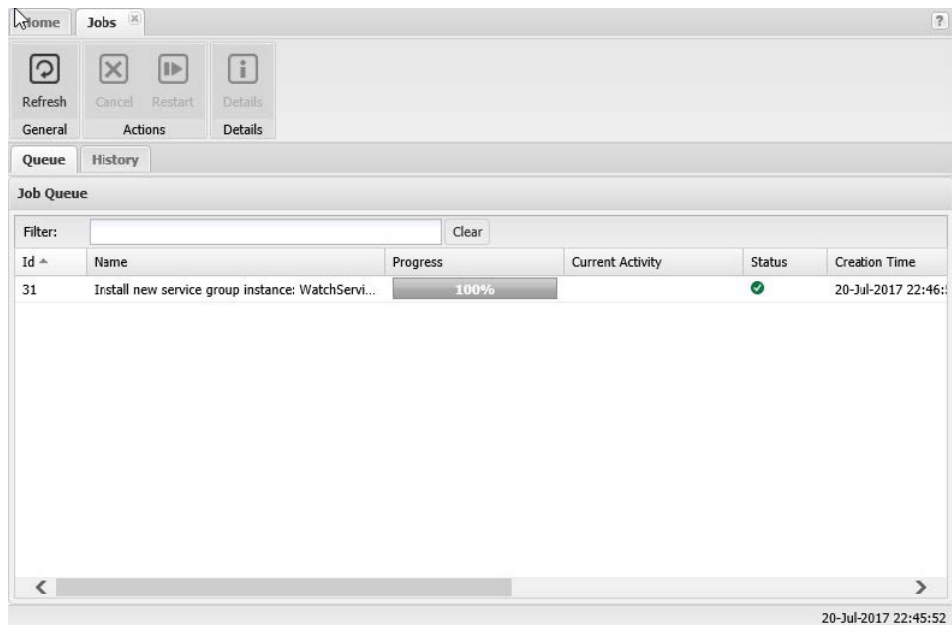
6. Select a server for the new Watch Service, then select Activate.



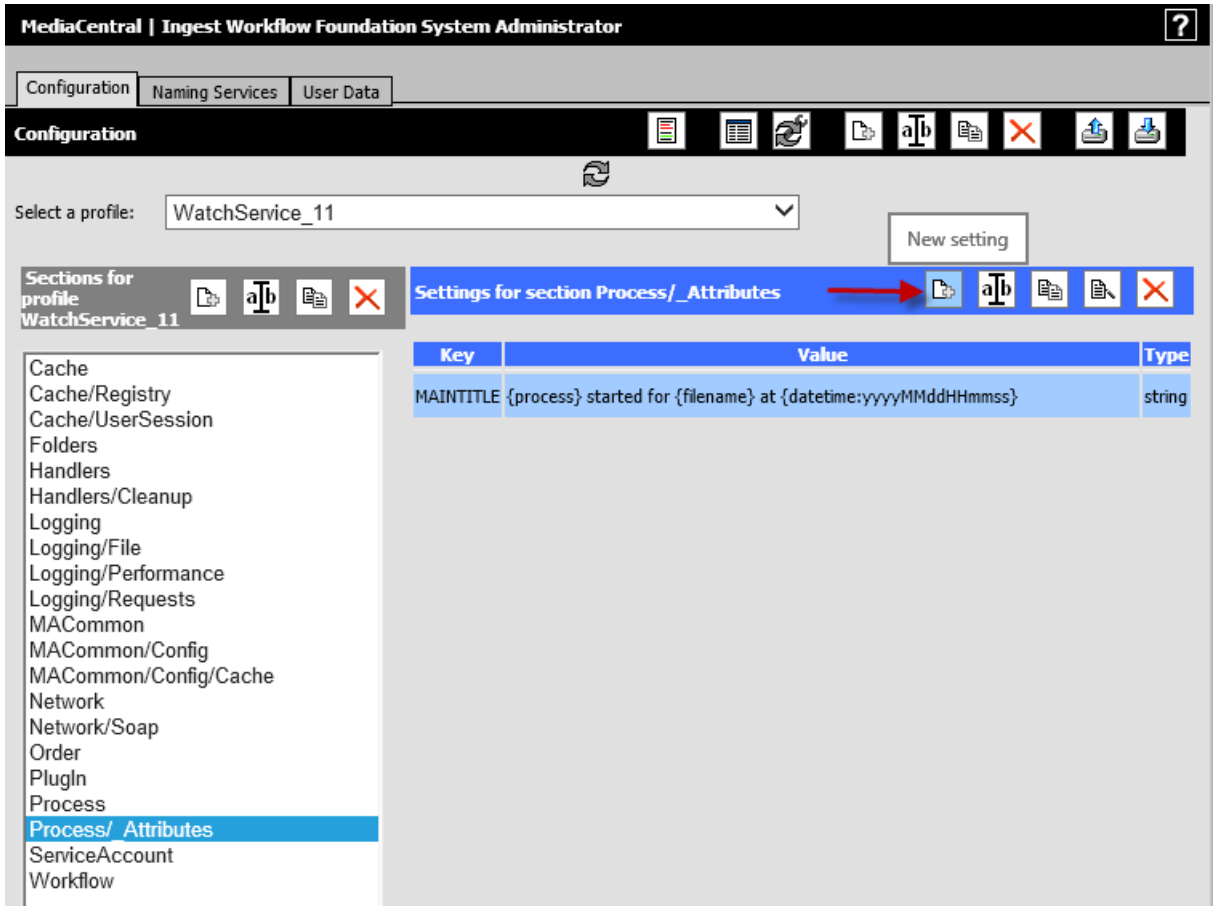
7. Confirm with Yes.



Job will be queued and should succeed:



8. The Profile associated with the new Watch Folder needs to be configured.
 SystemAdministrator: in the new WatchService profile, navigate to the section
 Process/_Attributes.



Add the following settings:

Setting	Recommended Value
FILEBOX_PROCESS_PROFILE_ID	As described in “Changing the Profile Associated with the Watch Folder” on page 158.
FILEBOX_PROVIDER_POOL	empty
FILEBOX_REST_API_URL	http://{system:MAM.Kit.MIPC.ServerName}:8083/api/md
FILEBOX_START_ON_INCOMPLET	false
E	

9. Additional Parameters should be adjusted as listed below, and described in [“Changing Additional Parameters for the Watch Folder”](#) on page 163.

Section	Setting	Recommended Value
Folders	DirectoryPollingIntervalInSeconds	5
	FileRegularExpression	\.mov\$ \.mp4\$ \.mpeg\$ \.mpg\$ \.mxf\$
	MaxDepth	1
	Trigger	FilesAndFolders
Handlers	Concurrent	3
Handlers/Cleanup	OnSuccess	Move
Process	ProcessClassName	PROCESS_FILEBOX_IMPORT

Using FTP Location as a Volume Source

Media Director v1.3 and greater supports source volumes that reside on an FTP location such as a Sony PWS-4400 UHD video server.



Note that FTP support is only available in the classic Job Builder UI.

Use the following guidelines:

- Windows: Navigate to the FTP server using Windows Explorer and drag and drop a volume to the MediaCentral Ingest Drop Utility.
- Mac: Mount an FTP server location and use drag and drop from a Finder window into the MediaCentral Ingest Drop Utility.

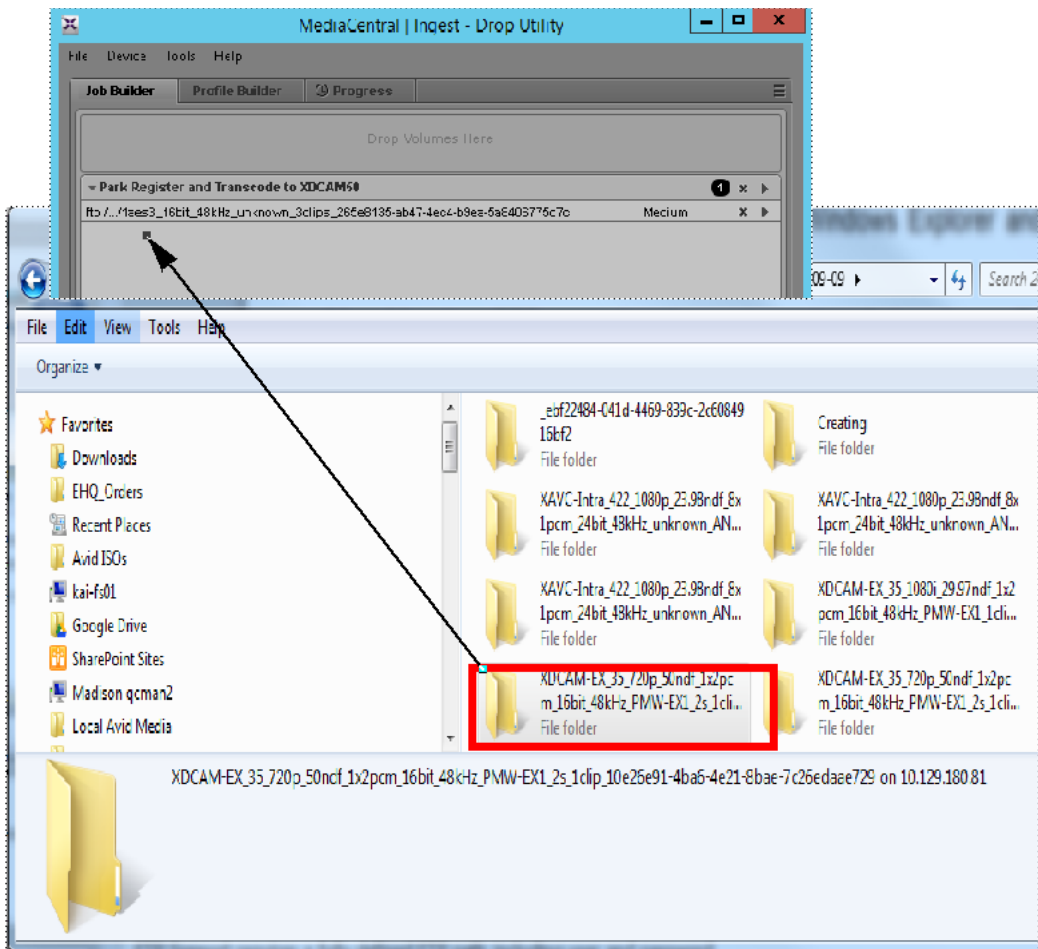
Note that the dropped URL can contain a user and a password for accessing the FTP site. You can use the same syntax that is used for configuring remote FTP storage path locations in the MediaCentral Ingest configuration, for example:

ftp://<ServerName>|<UserName>:<Password>@<ServerName>|<FTP PATH>

The following limitations apply:

- Only park workflows are supported (Direct Ingest via Cache - Park and Register - Park, Register and Transcode)
- Clip Tools and Shift+Drop are not supported for FTP sources.
- We do not support the use of the % character in an FTP path to media, or, on the Mac client path to media.

The following illustration shows a job created from an FTP location.



Copy Provider Service - WAN Support

Starting with Media Director v1.1, a Copy Provider service allows you to specify remote parking storage base path locations. Recall that the Parking Storage Path defined in a profile defines the folder structure that starts at the end of the Base path. This Copy Provider allows you to specify a Base path on a remote system. For additional information base paths and folder structures, see [“Defining the Parking Storage Folder Structure” on page 136](#).



Note that the Copy Provider service requires the Drop Utility to be installed and configured for either a MediaCentral Ingest or Cloud UX backend. With the Ingest app in browser native mode, the CPS is not available and uploads are performed by the browser instead.

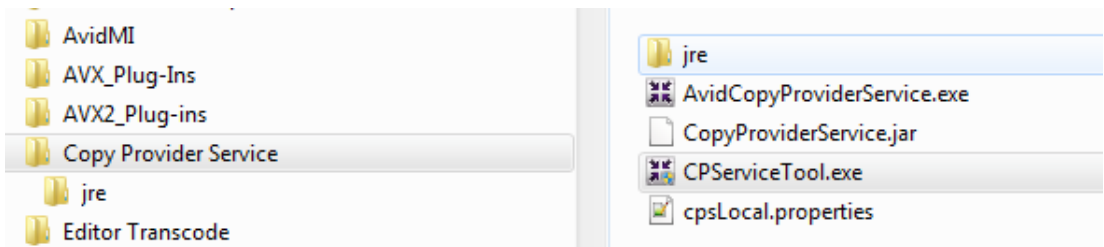
This feature is qualified with the following target storage locations:

- ISIS 2000/2500 integrated ISIS Gateway (uses CIFS protocol)
- FTP servers

The Copy Provider service runs as a configurable user that you can specify during the installation of the Drop Utility application. The user must have read/write permission on the remote parking storage. Once you initiate a remote copy operation, the job runs from the MediaCentral Ingest Engine, independent of the Drop Utility.

Installing the Copy Provider Service

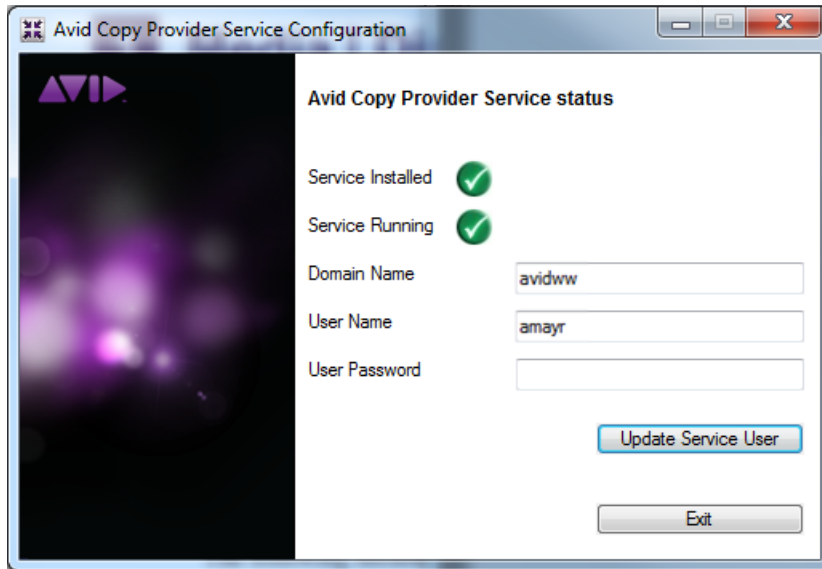
The Copy Provider Services (CPS) software is installed automatically on the MediaCentral Ingest Engine. Components of the Copy Provider service are also installed when you install the Drop Utility. The following shows the location of the CPS executable on the Drop Utility system.



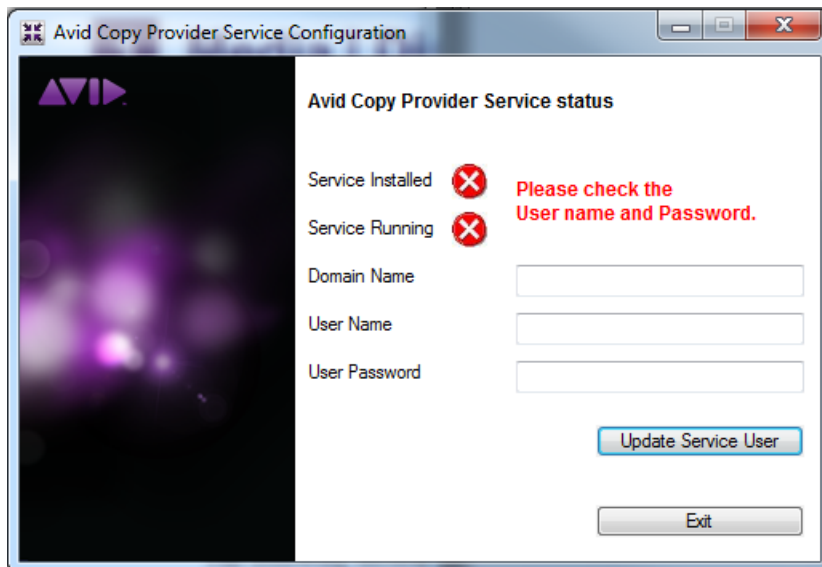
The following illustration shows the CPS service running on the Drop Utility system.

Avid DMF Service	Avid Dyna...	Manual	Local Syste...
Avid Editor Broker	The Avid Ed...	Started	Automatic
Avid Editor Db Engine	The Avid Ed...	Started	Automatic
Avid Editor Transcode	Avid Editor ...	Manual	Local Syste...
Avid Editor Transcode Status	Avid Backgr...	Started	Automatic
Avid Interplay Transfer Cache Engine	Avid Interpl...	Started	Automatic
AvidCopyProviderService	Avid Media ...	Started	Automatic
			avidww\la...

During the installation on the Drop Utility system, the installer prompts you for the credentials of the user account.



The user must exist on the Drop Utility system and have read/write access to the storage locations that will be used by the Remote Parking Storage Base Path. If you enter an incorrect credentials the green check boxes change to red and the system displays an error as shown in the following illustration. Enter a correct user and click Update Service User.





If the Copy Provider will be run as a local user and your sources are located on a network share, you may need to add the network share (\\ServerName) to the Windows Credential Manager.

Configuring the Remote Parking Storage Base Path

Use the MediaCentral Ingest Workflow Foundation Administration window to define the Remote Parking Storage Base Path. See [“Modifying the MediaCentral | Production Management Configuration Parameters” on page 148](#). Note that the installer does not create a default Remote Parking Storage Base path.

Using the Remote Parking Storage Base Path in the Drop Utility Application

Use the following procedure to instruct the Drop Utility to use the Remote Parking Storage Base Path defined on the current MediaCentral Ingest Engine.



Make sure that you configure your Remote Parking Storage Base Path for the protocol you want to use (CIFS or FTP).

To use the Remote Parking Storage Base Path in the Drop Utility:

1. In the Drop Utility, select Device > Add/Edit MediaCentral Ingest Engine.

The Configure Engine window opens.

2. Select a server that has a Remote Parking Storage Base Path defined and click the Edit button.

The Add/Edit Engine dialog opens.

3. Set the Upload Connection Type to “Remote” and click Save.

The current session of the Drop Utility folder will use the Remote Parking Base Path defined on the MediaCentral Ingest Engine. All profiles that specify a Parking Storage Path folder structure will use this remote path as the base of the folder structure.

Ingest to OP1a and Outgest to Op1a Features

Media Director v1.6 and higher supports several options to the Ingest from Op1a and Outgest to Op1a profiles.

- [Presets for MediaCentral Ingest Profiles](#)
- [Overrides for Ingest from OP1a and Outgest to OP1a Profiles](#)

Presets for MediaCentral Ingest Profiles

Presets define details about the target files a MediaCentral Ingest creates. Certain Ingest or Outgest operations support presets to define specific properties of the expected output. The following illustration shows some profiles with presets added in Media Director v2.2.

The screenshot shows a 'Presets' panel with the following settings:

- Start of Media:** Auto (same as source)
- Audio Track Count:** Auto (set to closest defined track count)
- Audio Channels Per Track:** 1
- Audio Bit Depth:** Auto (same as source)
- OP-1a Target:** Unconstrained OP-1a

Values are as follows:

- Start of Media (supported in: Outgest to OP-1a): One of the following:
 - Auto (same as source): preserves the StartOfMedia time code on the clip if there is any.
 - 0: A value of 0 sets the start of media timecode to 0.
- Audio Track Count (supported in: Outgest to OP-1a). Allows you to lessen or increase the number of audio tracks being generated. One of the following values:
 - Auto (set to closest defined track count as defined in the following list)
 - Explicitly set to 0, 2, 4, 6, 8, 16, 24, 32, or 64
- Audio Channels per Track
 - Explicitly set to 1
- OP-1A Target (supported in: Outgest to OP-1a). One of the following values:
 - Unconstrained OP-1a (default)
 - ARD/ZDF SDF/HDF: The OP1a file will adhere to the HDF format constraints used by a number of European broadcast companies. The media files following these format constraints adhere to a specific internal layout as described below.
- Audio bit depth (supported in: Direct Ingest, Park... Processes, Ingest from OP-1a, Outgest to OP-1a)
Allows you to define the audio bit depth of the OP-Atom or OP-1a files written. One of the following:
 - Auto (same as source)
 - 16 bit: Convert all source audio to 16 bit.
 - 24 bit: Convert all source audio to 24 bit. Note that upconverted audio samples will be zero padded.

ARD/ZDF SDF/HDF Profile Constraints

SDF (Standard Definition Format) and HDF (High Definition Format) are format constraints used by a number of European broadcast companies. The media files following these format constraints must adhere to a specific internal layout as follows:

- The audio tracks need to be set to either 8 or 16 (channel per track 1). If the source media has fewer tracks, silent audio tracks will be added.

This can be accomplished by using the Audio Track Count preset option and setting the appropriate number of audio channels.

- For HDF, only the following source formats are supported: XDCAM HD 50 1080i/25; AVC-Intra 100 (720p/50, 1080i/25).

This can be accomplished by selecting the appropriate video codec when defining the Transcode portion of the Outgest to OP1a Profile.

- Audio has to be 24bit 48kHz.
- The source media must not have an ANC data track.

For additional information, see Technical guidelines for TV productions in HD and SD.

Overrides for Ingest from OP1a and Outgest to OP1a Profiles

Overrides will influence the ingest and outgest operation in terms of attributes on the source media. The configured overrides change how the operations interpret the source media. The following illustration shows the ingest from Op1a overrides added in Media Director v1.6.

The screenshot shows a software interface titled "Overrides". It contains three sections, each with a label and a dropdown menu:

- Start of Media:** The dropdown menu is set to "Auto (same as source)".
- Aspect Ratio:** The dropdown menu is set to "Auto (same as source)".
- Active Format Descriptor:** The dropdown menu is set to "Auto (Active region same as coded frame (source material))".

Values are as follows:

- Start of Media: one of the following:
 - Auto (same as source): preserves the StartOfMedia time code on the clip if there is any.
 - 0: A value of 0 sets the start of media timecode to 0.

- Aspect Ratio: one of the following values:
 - Auto (same as source) will preserve the aspect ratio of the clip being brought into MediaCentral Production Management.
 - 4:3 will change the Aspect Ratio of the clip to 4:3 or 1.33:1 as used in Media Composer.
 - 16:9 will change the Aspect Ratio of the clip to 16:9 or 1.76:1 as used in Media Composer.
- Active Format Descriptor: one of the following values:
 - Auto (Active region same as coded frame (source material))
 - 4:3 aspect ratio
 - 16:9 aspect ratio
 - 14:9 aspect ratio
 - 4:3 with shoot and protect 14:9 center
 - 16:9 with shoot and protect 14:9 center

Naming Sequences for Outgest to Op1a

Media Director v1.6 and higher supports the ability to name the Op1a exported files in the Outgest to Op1a profile. The following illustration shows the options.

Transcode Resolution 1

Settings for Primary Resolution

OP1a Storage Path:

OP1a Metadata Path:

OP1a Export Name (MOBID used if empty) (?):

Source Video Format:

Source Audio Format:

Values are as follows:

- Op1a Storage Path: the storage path where the OP1A files are stored. The folder is created under the base OP1A storage folder. To change the default, see the parameter `Op1aDestinationBasePath` in [“Modifying the MediaCentral | Ingest Engine Configuration” on page 145](#).
- Op1a Metadata Path: the storage path where the metadata xml files are stored. The folder is created under the base OP1A metadata storage folder. To change the default, see the parameter `Op1aDestinationMetaBasePath` in [“Modifying the MediaCentral | Ingest Engine Configuration” on page 145](#).
- Op1a Export Name: one of the following:
 - The Op1a Export Name value is empty by default. If empty, the MOBID of the clip will be used as the export name.
 - Enter a token string to define the name. For information on creating tokens, see [“Entering Token Values” on page 123](#).

In particular, `Source.Metadata.Clip.VideoID` allows usage of the attribute Video ID of the MediaCentral Production Management asset.

- As well, token functions might be used.

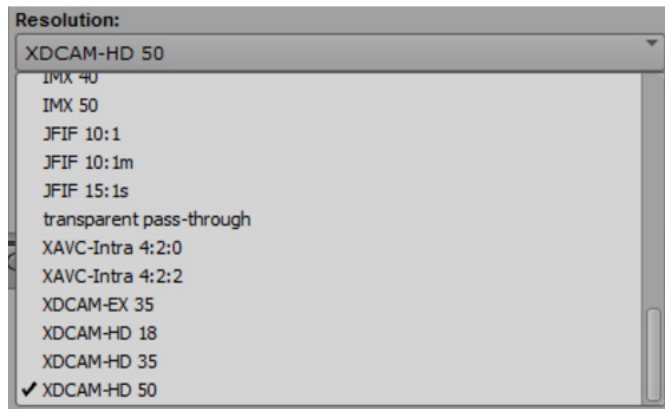
An example that creates a valid filename using the Video ID:

```
$sanitizeFilename({Source.Metadata.Clip.VideoID},_)
```

In case of an empty video id, the filename will be set to 'Empty Video ID'.

Transcode Option for Outgest to OP1a and Ingest from Op1a

Outgest to OP1a now supports a Transcode option. The following illustration shows the some of the available options.



Using XPath Tokens to Pull Text from an XML File

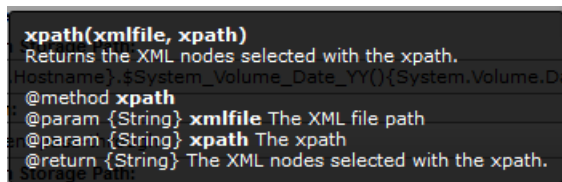
Starting in Media Director v1.6, you can use the xpath token to pull metadata from an xml file. This allows you to use the information to create folder names, clip names, etc.

The xpath expression identifies a node within an xml file that contains information about a media file or volume. For example, some cameras automatically create an xml file that contains metadata such as the photographer's name, the shoot location, and date. These xml files are often referred to as "side car" files. The xpath token allows you to access this data and add it to a token string.

The following Profiles support the xpath token:

- Direct Ingest
- Direct Ingest via Cache
- Ingest from OP-1a

The xpath token can be used with side car files that reside in simple folder structures (either one side car file per media file or one side car file per folder). The following illustration shows the tool tip from the xpath token:



The following illustration shows the contents of a sample xml file. The information that we want to extract is the photographer's name (in the case "Anonymous").

```

1 <burstXML>
2   <bubbleName>ross test</bubbleName>
3   <mediaTitle>test video portrait</mediaTitle>
4   <mediaCategory>U</mediaCategory>
5   <priority>r</priority>
6   <date>2016-08-17T16:35:38.444-04:00</date>
7   <organization>Anton Serhiychuk</organization>
8   <mediaCapture>
9     <photographer>Anonymous</photographer>
10    <date>20160817</date>
11    <time>16:26</time>
12    <timeZone>EDT</timeZone>
13    <city/>
14    <state/>
15    <country/>
16  </mediaCapture>
17  <description/>
18  <comments/>
19  <tags>Music,Approved-For-INCEPT,Ready-For-INCEPT</tags>
20  <mediaItem>
21    <objType>VIDEO</objType>
22    <objSlug>ross test</objSlug>
23    <objID>332718418279265</objID>
24    <mosID>BURST.MOS</mosID>
25    <mosAbstract>VIDEO:ross test</mosAbstract>
26    <objDur>360</objDur>
27    <objTB>30</objTB>
28    <objPaths>
29      <objProxyPath techDescription="Image">https://cdn.burst.com/a/730857159/v/332718418279265_100/rvt.jpg?Policy=eyJ
30      <objPath techDescription="Video">https://cdn.burst.com/a/730857159/v/332718418279265_100/mq.mp4?Policy=eyJTdGFCZ
31      <objProxyPath techDescription="Video">https://cdn.burst.com/a/730857159/v/332718418279265_100/lq.mp4?Policy=eyJJT
32    </objPaths>
33  </mediaItem>
34 </burstXML>

```

The following illustration shows a closeup of the section of interest.

```

1 <burstXML>
2   <bubbleName>ross test</bubbleName>
3   <mediaTitle>test video portrait</mediaTitle>
4   <mediaCategory>U</mediaCategory>
5   <priority>r</priority>
6   <date>2016-08-17T16:35:38.444-04:00</date>
7   <organization>Anton Serhiychuk</organization>
8   <mediaCapture>
9     <photographer>Anonymous</photographer>
10    <date>20160817</date>
11    <time>16:26</time>
12    <timeZone>EDT</timeZone>
13    <city/>
14    <state/>
15    <country/>
16  </mediaCapture>

```

The node containing the photographer's name can be identified as follow:

/burstXML/mediaCapture/photographer



Please make sure your xpath expression does not contain double forward slashes ("//"). Instead, please identify the node you wish to use explicitly. If you require the use of double forward slashes ("//"), please contact Avid Support for assistance with implementing a custom token function.

This example uses the following two files. One is the media file and the other is the side car file.

Z:\SampleMedia\Burst\Avid_Sample_Test.mov

Z:\SampleMedia\Burst\Avid_Sample_Test.xml



If the XML file that you wish to use the xpath function on resides on a network share that cannot be identified using the built-in tokens, please use one of the Profile Constant fields to specify the network path and reference it using {Profile.Constant.1} or {Profile.Constant.2}.

The following xpath expression identifies the side car file and the associated metadata:

```
$xpath(
{Source.Filesystem.Volume.Path}\{Source.Metadata.Clip.Name}.xml,/burstXML/mediaCapture/photographer
)
```

The following illustration shows the expression added to a profile to create an Interplay folder name:

Registration and Copy	
Interplay Folder Name:	\$xpath({Profile.Constant.1}\{Source.Filesystem.Volume.Path}.{Source.Filesystem.Volume.Name}.xml, /burstXML/mediaCapture/photographer)
Interplay Clip Name:	{Source.Metadata.Clip.Name}_{System.Clip.Increment}

Given the path and node information identified above, MediaCentral Ingest determines the following information:

- {Source.Filesystem.Volume.Path} = Z:\SampleMedia\Burst
- {Source.Metadata.Clip.Name} = Avid_Sample_Test
- xpath result = contents of /burstXML/mediaCapture/photographer = Anonymous

In this example, MediaCentral Ingest returns the text string Anonymous. So the MediaCentral Production folder name created in this example is named Anonymous as determined by the contents of the file.

Note that there are online tools that take an XML file and allow you to highlight the item of interest, returning the xpath expression. To find examples of these tools, search online for “xpath generator”. The following is one example: http://xmltoolbox.appspot.com/xpath_generator.html.



If the xpath expression generated by the tool requires the use of double forward slashes, please remember that you cannot directly use it in \$xpath function.

MediaCentral Cloud UX Ingest App

The MediaCentral Cloud UX Ingest App is a replacement for the Job builder in the form of a native Cloud UX app. The app allows you to quickly import field footage shot in various formats, process it against a selected pre-defined profile, and have it transferred to a safe storage location.

In the 2018.11 release, the Cloud UX ingest app ran exclusively in browser based ('browser native') mode as part of Media Central Cloud UX, with a limited feature set. As of 2019.2, the Ingest app can also run inside the Drop Utility. This overcomes the browser's sandbox restrictions and restores full volume support and interaction with the host operating system.



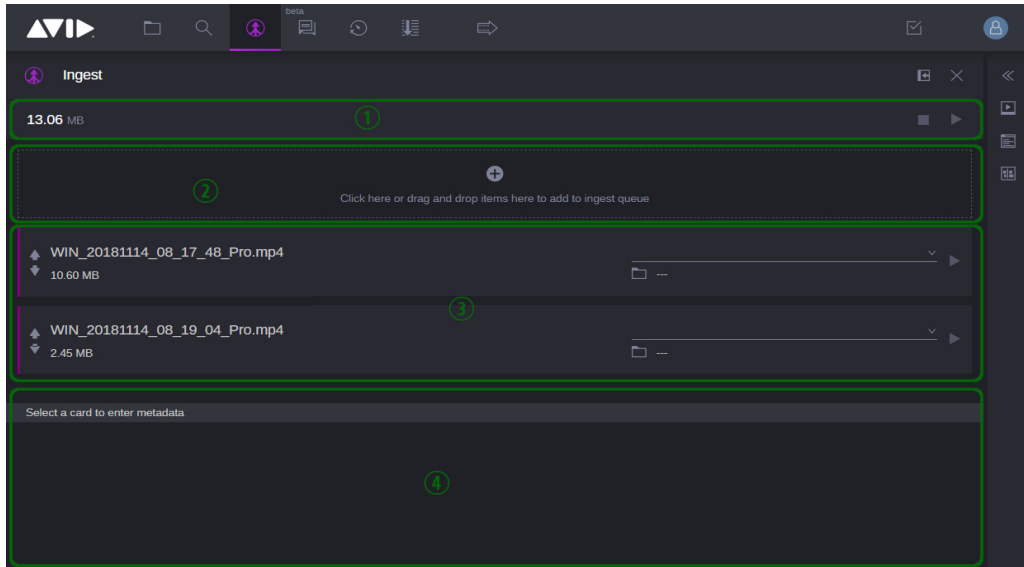
When run in browser native mode, the Ingest app does not allow you to import volumes and folders because of the security restrictions imposed by the browser.

To use the Ingest App you must be logged in to MediaCentral Cloud UX. For information on logging in to MediaCentral Cloud UX, see the *MediaCentral | Cloud UX User's Guide* on the Avid Knowledge Base page.

The Ingest App Screen Elements

The app shares the same behavior as other MediaCentral Cloud UX apps. This includes such features as docking, resizing, and switching between apps. For more information refer to the *MediaCentral | Cloud UX User's Guide*.

The following illustration shows the main areas of the Ingest App screen: 1) The summary bar 2) The drop area 3) The job queue 4) The metadata area.



The Ingest screen is divided into the following areas (as highlighted in the figure above):

- **Summary bar** - the summary bar contains information about the total size of the imported files that are currently in the job queue, and a set of buttons for manipulating waiting jobs. For more information, see the [“Using the Summary Bar” on page 87](#).
- **Drop area** - this is where you add files to be processed. You can drag and drop files here, or you can use the Add button.
- **Job queue** - the list of jobs in preparation. It contains both the processed and unprocessed jobs. Jobs are displayed as cards.
- **Metadata area** - in this area you provide metadata information about a job to be processed. This area shows up only when you have selected a job.

Using the Summary Bar

On the left-hand side of the summary view, you can see the information about the total size of the jobs in the queue.



There are three buttons on the right of the summary bar:

Button	Action	Description
	Remove selected card	Click this button to delete a selected card from the job queue. The button only appears when you have a card/cards selected in the queue.
	Start selected card	Clicking this button without a card selected in the job queue starts ingesting all unprocessed jobs in the queue. When a card or cards are selected, clicking this button only starts the processing of the selected jobs. This button is also present on every job card.
	Cancel selected card	Clicking this button cancels all jobs that are in progress. This button is also present on every job card.

Creating Jobs

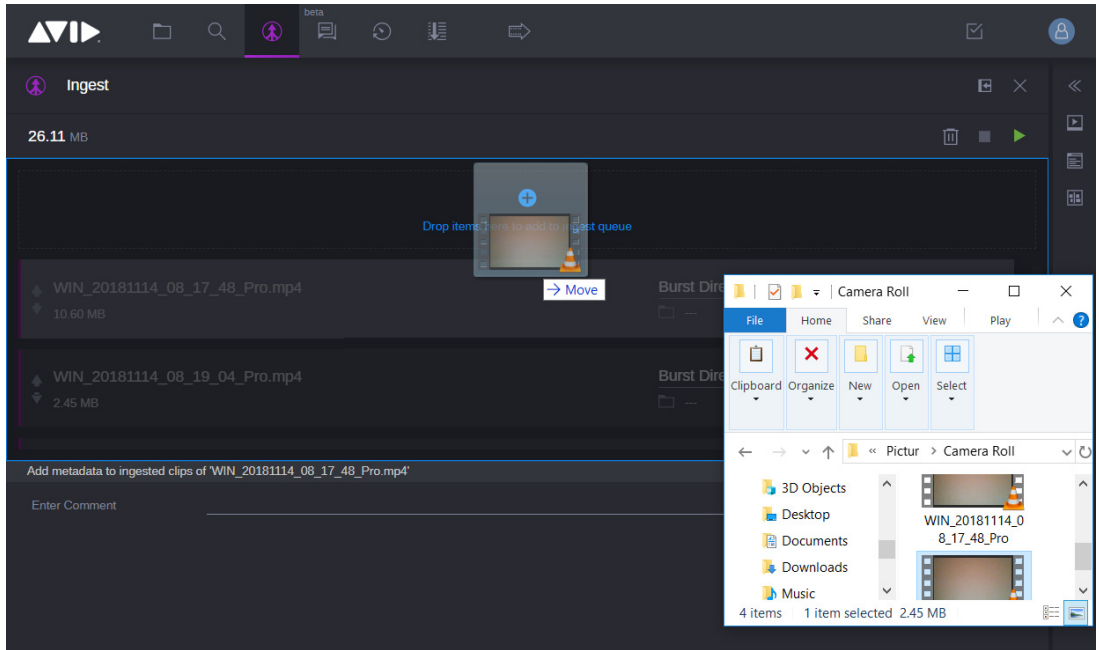
You can create jobs in the Ingest App by dragging and dropping files into the drop area, or by using the Add button. You can drag and drop or add multiple files.



When running in the browser, you cannot create jobs that contain folders. To import the contents of a folder in browser native mode, you have to go inside the folder and select its contents.

To create jobs by dragging and dropping:

1. Open a folder on your local drive from which you want to import your files, so that the browser with the Ingest app is visible.
2. Select a file or files that you want to import and drag and drop the selected items onto the drop area, as shown in the illustration below. The system highlights the area as you drag a file or files over it.



To create jobs by using the Add button:

1. Click the Add button, inside the Ingest app drop zone.
2. In the file manager window that opens, select a file or files that you want to create jobs for.
3. Click to confirm your selection and import the files (for example, in Windows systems, by clicking the Open button).

As a result, the jobs that you created appear in the queue. Jobs are displayed in the queue as cards. The name and size of a job is displayed on the left.

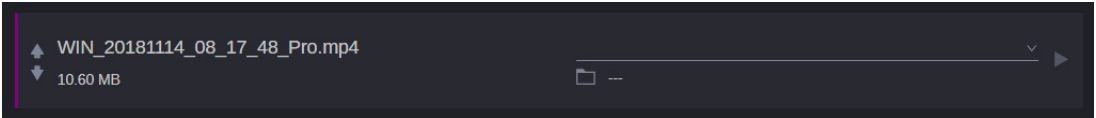
A scroll bar shows up on the right of the job queue when the number of jobs runs outside the job queue.

Cards can be rearranged by dragging and dropping them in a different location in the job queue.

Job Cards

After creating a job in the Ingest App, it shows in the queue as a card. On the left-hand side, a job card displays the folder or filepath that it will process, and the size of the media under this path.

Cards can be rearranged by dragging and dropping them in a different location in the queue. The order in which cards are arranged - top to bottom - determines a rough processing order. That is to say, that when you click the Start job button in the Ingest App summary with no cards selected, the cards will be submitted for processing, one by one, starting from the topmost one. It is important to notice that the MediaCentral Ingest backend uses a variety of strategies for optimizing throughput so there is no guarantee that jobs that are higher in the list than others will also finish first.



Using the two arrows on the left-hand side of the job card, the ‘up’ and ‘down’ arrow button, you can change the priority of the job. By clicking the ‘up’ arrow button on a card, you set this card to high priority. Such a job will be processed before other jobs with low priority, or no priority set. Similarly, you can also assign low priority to a job. Such a job will be processed after all other high priority and no priority jobs are processed.

Button	Action	Description
	Set the card to high priority	Clicking this button on a job card without a priority set, changes its status to high priority. As a result, the button changes its color to red. Clicking this button again resets the job’s priority to ‘normal’ (that is, no priority set).
	Set the card to low priority	Clicking this button on a job card without a priority set, changes its status to low priority. As a result, the button changes its color to blue. Clicking this button again resets the job’s priority to ‘normal’ (that is, no priority set).

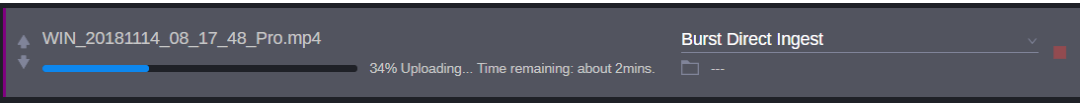


You can set multiple jobs to high or low priority.

On the right-hand side of the card, you can select a pre-configured profile for running the job:



When a job is running, a progress bar is displayed below the media path, indicating the percentage and the stage of the process.



Below the profile menu, the folder icon shows the location that the job is sent to in the MediaCentral Production database. Since the database location can depend on information that is available only when the job is running, the card initially displays the ellipsis ('...') symbol that is replaced by the target folder once the information is available.

On the right-hand side of the job card, you can also find a Start button, which changes its state depending on the process that is currently in progress. The table below explains the function of the buttons:

Button	Action	Description
	Start job	Clicking this button on a job card starts the process as defined by the selected profile. The button is grayed out until you select a profile from the profile menu, then its color changes to green. After you click the button, it changes to the Cancel job button.
	Cancel job	Use this button to stop a job that is in progress. After the job is canceled, the button changes to the Reset job state button.
	Reset job state	The Reset job state button is displayed on a card when a process has been canceled or failed. For example, you can correct your profile choice and click it to restart the job.

Running/Submitting Jobs

You can submit a single or multiple jobs to the backend.

To submit a single job:

1. For one of the jobs that created you imported earlier, select a Profile from the list of user defined profiles, by using the Profile menu. For example, select the standard 'Direct Ingest' profile that is available by default on all systems.

For additional information on creating profiles, see [“Working with MediaCentral | Ingest Profiles” on page 111](#).

2. Add metadata to the job to be submitted, in the Profile parameters metadata area, at the bottom of the screen. The area requests the metadata that is specified in the profile and highlights mandatory fields with a red underscore. Note that a job cannot be started if mandatory metadata is missing.

WIN_20181114_08_17_48_Pro.mp4
10.60 MB

Custom Metadata Direct Ingest

Add metadata to ingested clips of "WIN_20181114_08_17_48_Pro.mp4"

* Enter area

* Enter production number

* Enter new clip name

Enter Comment

3. Click the green Start job button on the right-hand side of the card to start the job.

As a result, the green Start job button changes to a Cancel job button. At any time during the process, you can stop it and re-set it (for example, to select a different profile) by clicking the Cancel job button.

The progress bar that appears on the left, indicates the status of the ingest process. The outcome of the process can be:

- "Successful" - The job has successfully finished, and the source has been successfully transferred to the server and it is available as an asset. The progress bar changes its color to green. The database folder location under the profile menu tells you where you can find your asset in the Media Central Cloud UX directory structure. You can now delete the job card from the queue;
- "Error" - The progress bar changes its color to red, and information on the cause of the failure is displayed next to it. You can still try to select a different profile and reset the failed job and retry it.

To run multiple jobs:

1. Select a profile for the job and add metadata for each of the cards that you wish to submit. Use the Ctrl/Shift + mouse click combination.

Only the selected cards will be processed.

2. Click the Start job button, on the right-hand side of the Ingest app summary bar.

Processing starts for all the selected jobs. You can monitor the progress of the process by viewing the progress bars of the jobs being processed. The outcome of the process can be "Successful" or "Error". For more details on these outcomes, see the section above, on running a single job.

Successfully ingested files are immediately available as assets in the MediaCentral Cloud UX Browse App browser and you can immediately start working with them. The database path under the profile menus tells you where you can find your assets in the MediaCentral Production Management directory structure. You can now delete the processed job cards from the queue.

You can cancel and restart a started job, for example, if you need to change the profile. You can also restart a failed job. To interrupt/restart a job:

1. In the card of a selected job, click the Cancel job button
The Cancel job button changes to the Reset job state button, and the Ingest App displays the “Job cancelled” information on the card.
2. Click the Reset job state button to reset the canceled job.
The Ingest App displays the “Resetting card” message on the card and the Reset job state button changes into the Start job button.
3. Select a different profile from the Profile menu on the card.
4. Click the Start job button to start the job.

Deleting Jobs

You can delete staged jobs from the job queue. Jobs can be deleted before or after running them. Before running a job, you may want to delete it if you added it by mistake (such as a duplicate of a job).

After running a job, you can delete it since the media it references has already been converted to an asset and copied to a safe location on the server, so you no longer need that job in the queue.

You can delete a single job, or multiple jobs.

To delete a job:

1. In the job queue, select a card or cards (selected using the Ctrl/Shift + mouse click combination).
2. Click the Remove selected card button, on the right-hand side of the Ingest app summary bar.

As a result, the deleted jobs are removed from the job queue.

3 Using the MediaCentral | Ingest Clip Tools

Clip tools are an add-on to the MediaCentral Ingest Drop Utility that, once installed, significantly enhance the feature set of the Drop Utility. Clip Tools are installed on the client machine or server. With Clip Tools installed, the Drop Utility changes from a “Drop box” style client to a full featured media processing utility that allows you to select individual clips or groups of clips for processing. Clip Tools are fully integrated with MediaCentral Ingest’s process engine, meaning that the Clip Tools features are supported in all MediaCentral Ingest processes. For example, you could simply upload a selection of source clips, or you could run the full Park-Register-Transcode workflow with multiple resolutions. Using Park-Register-Transcode you could upload a proxy version of selected clips, park the high res media in the background and make both resolutions available through the Dynamic Relink feature.



Note that Clip Tools are currently only available for the classic MediaCentral | Ingest UI on Windows.

As on the MediaCentral Ingest server, Clip Tools leverages supported AMA plugins for the following:

- Accessing volumes for displaying clips and metadata contained in the volume, and
- Reading clips for uploading a selection of clips from inside a volume to a local or remote MediaCentral Ingest server

AVC-Intra,DV-...

Filter:

☐ Panasonic P2: AVC-Intra,DV-based_100_1080i_25ndf,50ndf_4x1pcm_16b...

Clip Name	Start Time	Duration	Encoding	Tracks
☐ speedy	01:02:04:00	00:00:03:17	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ speedy 2	01:02:07:17	00:01:06:11	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ DVCPro HDi	00:00:00:00	00:00:16:05	DV-based 100	V:1 - A:4x1 - D:0
☐ event	00:06:59:09	00:00:24:17	DV-based 100	V:1 - A:4x1 - D:0
☐ JT0030	00:07:24:02	00:01:35:17	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ 0015JU	00:04:20:42	00:00:29:48	DV-based 100	V:1 - A:4x1 - D:0
☐ board dude	01:00:16:19	00:00:09:11	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ boatdriver	01:00:26:05	00:00:08:03	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ falling	01:00:34:08	00:00:28:04	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ xxx	01:01:02:12	00:00:12:10	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ 0008OR	01:01:31:08	00:00:05:09	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ 0009WM	01:01:36:17	00:00:10:09	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ wake 3	01:04:23:01	00:00:44:02	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ 00176K	01:06:00:02	00:01:26:01	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ 0018LZ	01:07:26:03	00:00:18:21	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ 0020B8	01:07:53:11	00:00:08:07	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ start 2	01:08:14:11	00:00:44:10	AVC-Intra 100	V:1 - A:4x1 - D:0
☐ 0025TD	01:11:46:00	00:00:06:01	AVC-Intra 100	V:1 - A:4x1 - D:0

Please select a clip for more details...

Select 0 ClipsStart 0 Clips

Summary

Video

Audio

Custom

Name	Value
Duration	00:00:08:03
Start Timecode	01:00:26:05
Raster	1080i (1920x1080)
Framerate	25 fps interlaced
Encoding	AVC-Intra 100
Tracks	V:1 A:4 D:0
Color Sampling	10 bit 4:2:2
Color Space	Unknown
Audio Encoding	PCM
Audio Sampling	48kHz 16bit
Audio Wrapping	AES-3 ST 382

Like MediaCentral Ingest itself, Clip Tools ship with a range of AMA plugins included. The plugins included by default are:

- Apple QuickTime
- AMA Generic MXF

Additional AMA plugins can be downloaded from the respective manufacturers for installing them on the Drop Utility client(s). The currently supported plugins are:

- Sony XDS and Sony EX
- Panasonic P2
- Canon XF

Additional plugin are being qualified and will be listed on the [MediaCentral Production Compatibility Matrix](#) as they become available.

Installing the MediaCentral | Ingest Clip Tools Add-On

The Clip Tools add-on uses its own installer that is available on the MediaCentral Ingest web interface. If you install the Clip Tools on an individual client system you may need to install additional plugins as well.



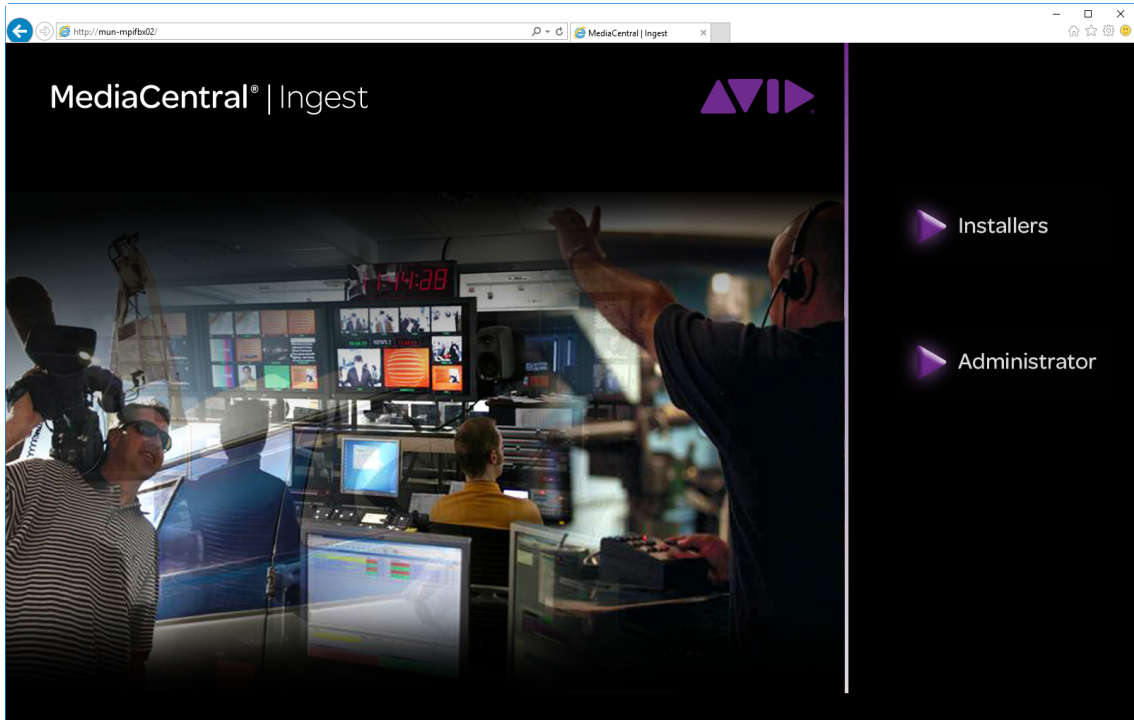
The Clip Tools add-on is Windows only. It is not available on Mac OS X clients.

To access the MediaCentral | Ingest web interface:

1. Open a browser and navigate to following URL:

`http://<engine name>`

The following illustration shows the web interface.

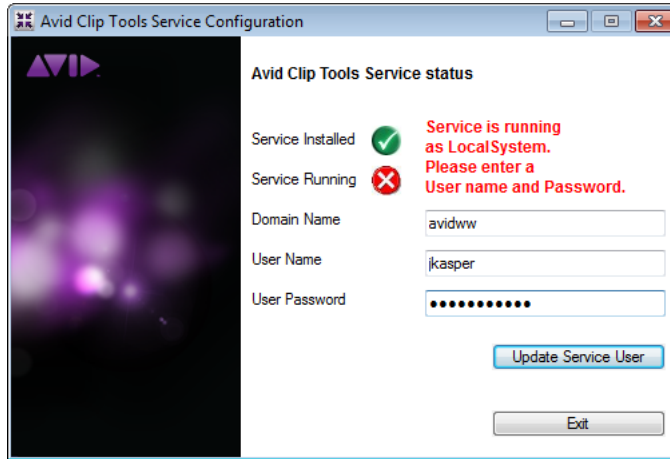


To access the Installers web page on Windows use Chrome, Mozilla Firefox, or Internet Explorer v 9.0 or higher.

To install the Clip Tools Service:

1. Click the Installers link and then click MediaCentral Ingest Clip Tools Service.
2. Download and start the installer.
3. Follow the system prompts to complete the installation.
4. At the end of the installation the installer prompts you for the credentials of the user that will run the Clip Tools service.

Use the same user you identified for the Copy Provider when you performed the Drop Utility installation. The user must exist on the Drop Utility system and have read/write access to the storage locations that will be used by the Remote Parking Storage Base Path. For additional information on the Remote Parking Storage Base Path, see [“Modifying the MediaCentral | Production Management Configuration Parameters”](#) on page 148.



5. Enter the credentials and click Update Service User.



If the Clip Tool service will be run as a local user and your sources are located on a network share, you may need to add the network share (\\ServerName) to the Windows Credential Manager.

Displaying Volume Contents

With Clip Tools installed, Clip Tools can display volume contents and clip metadata.

To display the contents of a volume:

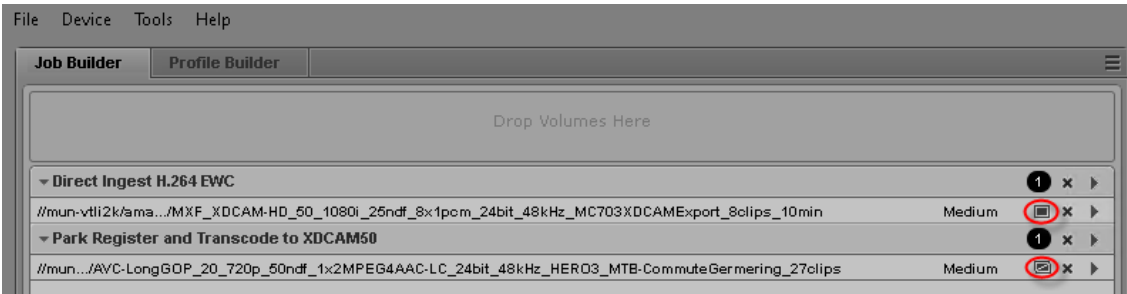
1. Select and drop one or more source volumes, or a source volume hierarchy, onto the drop zone. The Profile Selection dialog opens.



If the Clip Tools Service is installed, and you press the Control key and drag and drop your source to the MediaCentral Ingest Drop Utility it will automatically open in Clip Tools allowing you to quickly choose which clips you want process. Then, “Select” the number of jobs you wish to process and proceed with choosing the profile you wish to process the volume with.

2. Select a profile and enter any mandatory metadata. Click “Add x jobs” to add your volume selection to the staging area.

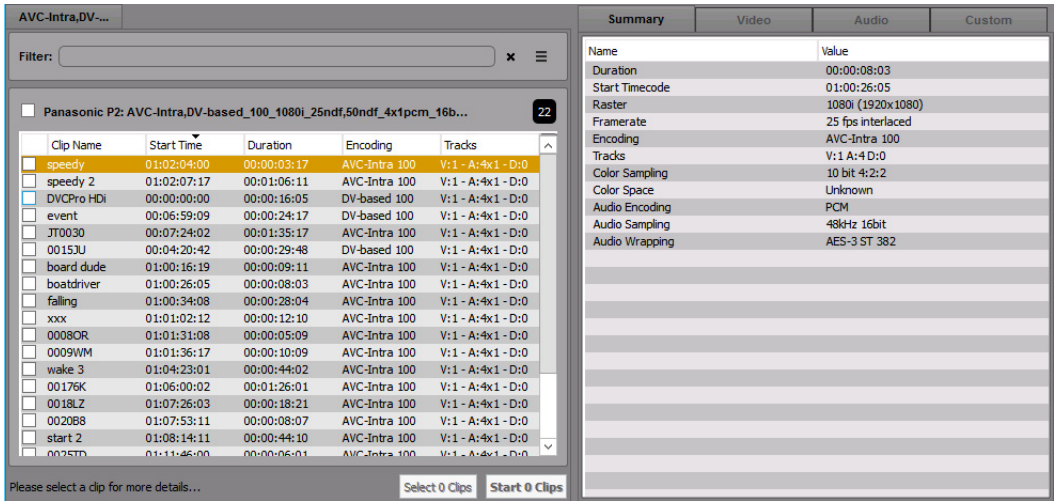
The following illustration shows two loaded volumes. The top oval shows the icon for a full volume and the bottom oval shows the icon for a partial volume.



3. In the staging area, select a volume and click the Clip Tools button or double click the volume. The Clip Tools window for this volume opens.



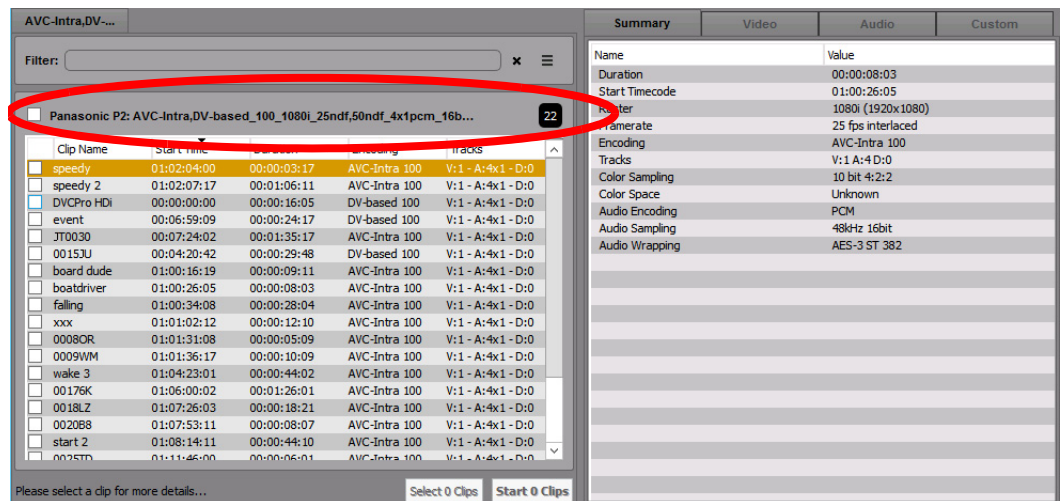
Starting at Media Director v1.5, you can Ctrl + Drag and drop a volume to the Job Builder. This will auto open the volume with ClipTools if installed.



Volume Information

The Volume Information pane shows you all the clips contained in the volume you selected, along with an overview of the most relevant metadata. The following metadata is shown by default:

- Clip name, as presented by the AMA plugin. Note that this logical clip name may differ from the actual file name on the media.
- Start time code
- Duration
- The essence encoding, in SMTPE terms
- Track information – the number of video (V), audio (A) and data (D) tracks available in a particular clip. Note that the audio tracks are displayed as (tracks x channels), to provide information about the track/channel structure of the source.



The above illustration highlights the window title. This area displays the type and name of volume. To the left is the selection box that allows you to select or deselect all clips in the volume. The black box on the right indicates the number of clips in the volume.

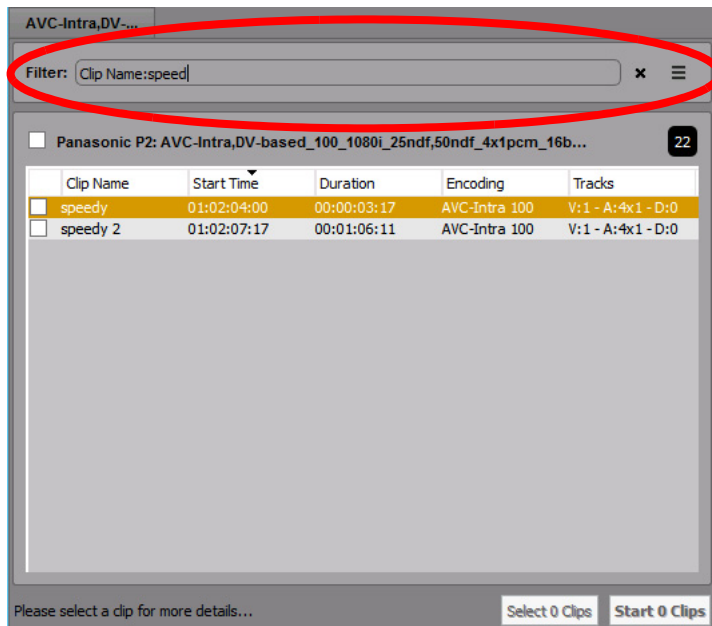
To select clips:

- ▶ Use the check box in the left most column to select one or more clips for ingest.
- ▶ Alternatively you can select clips by double-clicking the clip.
- ▶ You can use the up and down arrows to navigate up and down the grid list. Then press the space bar to select the currently highlighted clip.

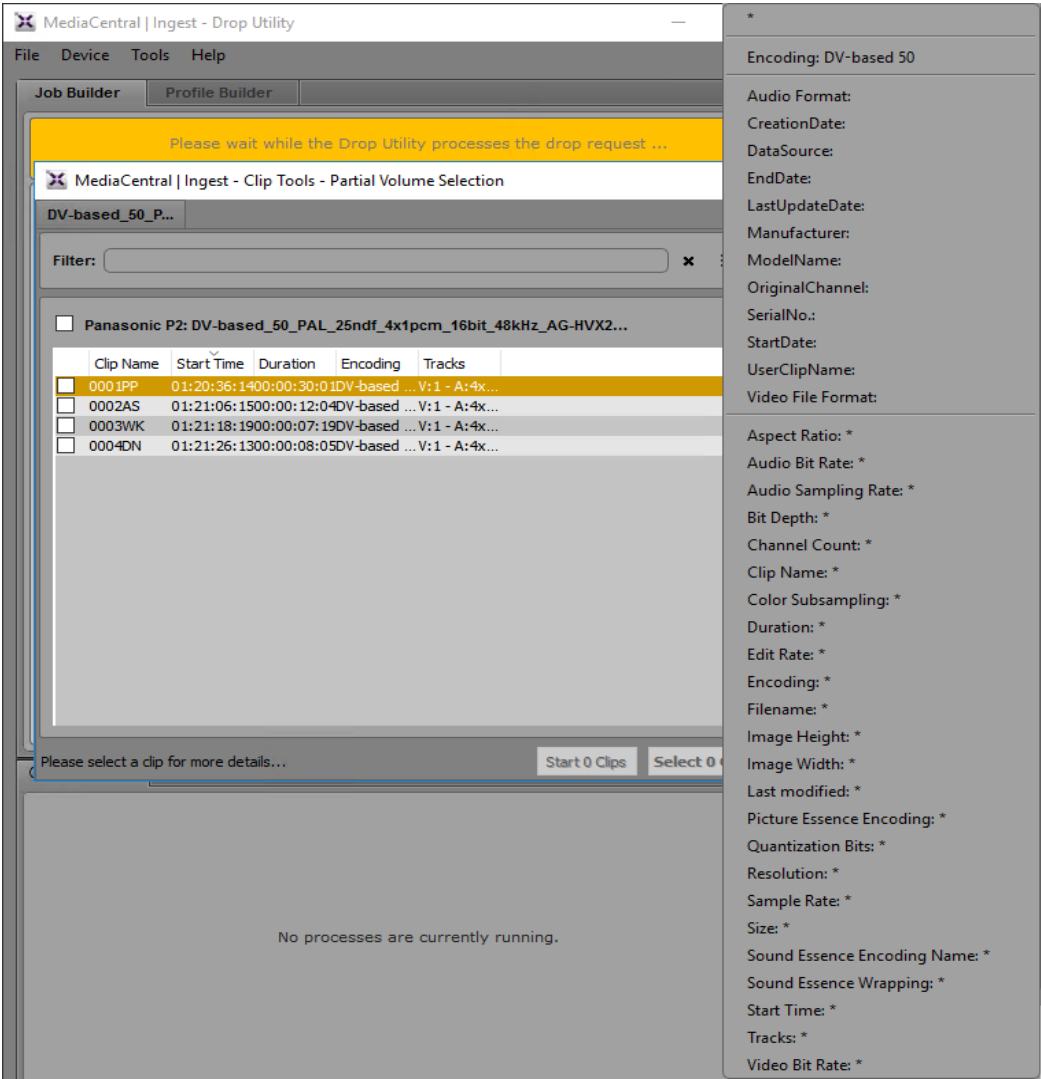
- ▶ You can select or deselect all visible clips together by using the global selection check box at the left hand side of the volume type label.
- ▶ You can use Shift-click and Control-click to highlight multiple clips in the grid.

Filtering the Clips in a Volume

There are several ways to filter the clips in a volume. The following illustration shows the Filter text field along with the X that clears the field and the menu that allows you to select filters. The Filter text window accepts parameters in the form *<metadata column>:<filter value>*. For example, the illustration shows the value “Clip Name:speed.” The system displays any clips where the name property contains the text string “speed”.



The following illustration shows the contents of the Filter menu. Values may change depending on the contents of the volume. For example, the second set of entries shows the encoding formats available in the volume. This example shows DV-based 50 but there could be other or additional resolutions available to filter on.



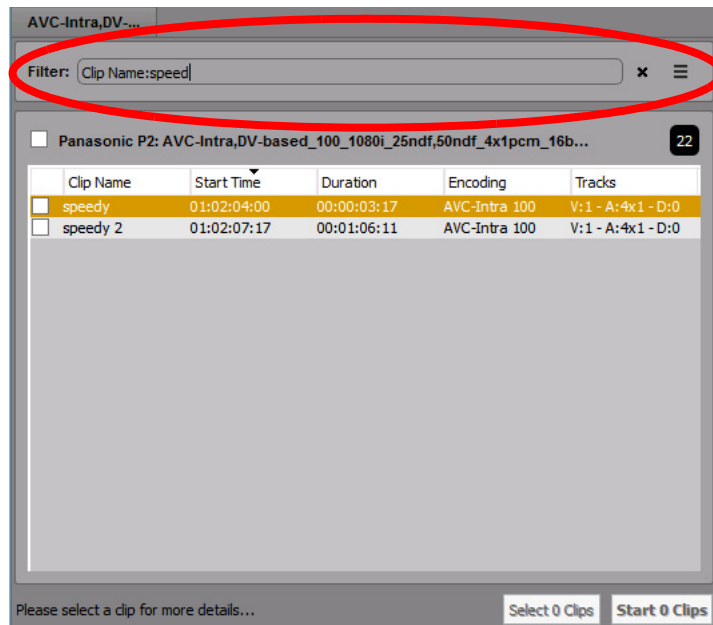
The following table shows the values available in the Filter menu. An asterisk indicates that the filter will search all corresponding values. You replace the asterisk with a text string or number.

Menu Sections	Contents
Top section “*”	Contents = * The default is all values.
Second section	A list of available encoding formats in the volume.

Menu Sections	Contents
Third section	A list of metadata on the “Custom” tab that you can search for. This list will change depending on the Plugin used to process the volume.
Fourth section	A list of common metadata that you can filter on.

To filter the clips in the volume:

1. The filter text window accepts parameters in the form *<metadata column>:<filter value>*. Either type in a filter (such as a column name) followed by a colon or select a value from the menu to the right of the text window.
2. Type in the value you want to filter on and press Return. The following example shows the results of entering Clip Name:speed. The system displays any clips that contain that string.



3. (Option) Click the X to the right of the text field to clear the filter.

Button/status pane (lower left pane)

The button/status pane offers two buttons:

- Click “Select x Clips” to commit the clip selection, close the Clip Tools window, and return to the volume list from where the processing can be started. A “partial selection” icon will appear in the staging area to indicate that a subset of clips has been selected for ingest. From this state, the Clip Tools window can be reopened at anytime to modify the clip selection. Metadata will appear immediately since it has been cached from a previous scan.
- Click the “Start x Clips” button to commit the clip selection, close the Clip Tools window and immediately submit the job for processing. The volume will disappear from the staging area and transition to the progress pane.

The status area at the bottom of the window provides progress information and displays messages as shown in the following illustration.



Clip Details (right pane)

The right pane of the Clip Tools Windows offers a tabbed metadata view. Across the four tabs, all metadata available from the AMA plugin is accessible. The following tabs are available:

- The Summary tab offers a condensed view of the most relevant metadata, suitable for a quick overview. It displays essential clip information as shown in the following illustration.

[illegible]

Note that the Raster property displays the SMPTE standardized term for the raster (in this case, 1080i) and – in brackets – the raster information for this resolution. Non-standardized resolutions are displayed as Custom.

- The Video tab provides all available details about the video track(s) in the source media in more technical detail and with less filtering directly from the plugin. The pane includes information about edit rate, essence encoding, raster size and color parameters as shown in the following illustration.

Summary	Video	Audio	Custom
Name		Value	
Track ID		1	
Edit Rate		25/1	
Sample Rate		25/1	
Picture Essence Encoding Family		DV-DIF	
Picture Essence Encoding		DV-based 100	
Video Bit Rate			
Colorspace		Unknown	
Frame Layout		Separate Fields	
Image Width		1920	
Image Height		1080	
Aspect Ratio		16:9	
Color Subsampling		4:2:2	
Bit Depth		10	

- Similar to the video tab, the Audio tab provides full details about every audio track that is part of the source. Information about encoding, sample rate, container format and channel structure are available. Also, more technical information such as track numbers and IDs can be reviewed. The following illustration shows an example of the Audio tab.

Summary	Video	Audio	Custom
Name		Value	
Track ID		2	
Edit Rate		25/1	
Sample Rate		48000/1	
Sound Essence Encoding Family		Uncompressed	
Sound Essence Encoding		Uncompressed	
Sound Essence Wrapping		AES-3 ST 382	
Sound Essence Encoding Name		PCM	
Audio Sampling Rate		48000/1	
Channel Count		1	
Quantization Bits		16	
Bit Rate		768000	
Track ID		3	
Edit Rate		25/1	
Sample Rate		48000/1	
Sound Essence Encoding Family		Uncompressed	
Sound Essence Encoding		Uncompressed	
Sound Essence Wrapping		AES-3 ST 382	
Sound Essence Encoding Name		PCM	
Audio Sampling Rate		48000/1	
Channel Count		1	
Quantization Bits		16	
Bit Rate		768000	
Track ID		4	
Edit Rate		25/1	

- The Custom tab displays all vendor specific metadata available from the AMA plugin. Note that the content of this tab will vary between basic and rich, depending on the AMA plugin and the amount of metadata available in the source media. The data items shown are defined by the specific plugin and metadata schema in the source media. The following illustration shows an example of the Custom tab.

Summary	Video	Audio	Custom
Name	Value		
AspectRatio	16:9		
Audio Format	PCM (MXF)		
CreationDate	2010-04-15T00:15:39+00:00		
Creator	BCollins		
DataSource	SHOOTING		
EndDate	2010-04-15T00:17:14+00:00		
LastUpdateDate	2010-04-15T00:17:14+00:00		
Manufacturer	Panasonic		
ModelName	AJ-HPX2700G		
OnScreenTimecode	ON		
OriginalChannel	0 1		
PlaceName	TOLUCA		
ProxyAudioBitRate	64000		
ProxyAudioCodec	AAC		
ProxyFormat	MP4		
ProxyFrameRate	25		
ProxyResolution	QVGA		
ProxySamplingRate	24000		
ProxyVideoBitRate	1500000		
ProxyVideoCodec	MPEG-4		
Purpose	Testing the wireless metadata tool in the ...		
Reporter	TBD in Field		
SerialNo.	J8TKA0010		
Shooter	JIM THOMAS		
StartDate	2010-04-15T00:15:39+00:00		
UserClassName	IT0030		

Note that you can filter clips based on Custom fields. Filters are plugin specific. For example, to search for all media shot at a specific location, the Panasonic plugin uses “PlaceName” (see above) and a Sony plugin might use “Location.” For additional information, see [“Filtering the Clips in a Volume” on page 100](#).

Clip Highlighting

Clip Tools highlight new clips on a card or source by displaying them in bold font. Cached information about “known” sources will not only speed up opening the Clip Tools window but will also highlight the difference between the previously known and current content. The information is stored locally only and can be reset manually using the Clear Cache drop down menu.

Highlighting new material as bold is useful to identify media that has been added to a card or carrier without deleting the previous content first. In the following example, the clip named 0020C8 has been added to the card since the last time the card was read on this client.

P2 54					
	Clip Name	Start Time	Duration	Encoding	Tracks
☒	0012UR	01:24:56:02	00:00:10:20	DV-based 100	V1 A4 D0
☒	0013KF	01:25:06:22	00:00:10:10	DV-based 100	V1 A4 D0
☒	0016SB	01:25:40:16	00:00:09:17	DV-based 100	V1 A4 D0
☒	0017KN	01:25:50:08	00:00:16:08	DV-based 50	V1 A4 D0
☒	0018OL	01:26:06:16	00:00:07:08	DV-based 50	V1 A4 D0
☒	0019OF	01:26:13:24	00:00:03:17	DV-based 100	V1 A4 D0
☒	0020C8	01:26:17:16	00:00:05:11	DV-based 100	V1 A4 D0
☒	00212V	01:26:23:02	00:00:03:02	DV-based 100	V1 A4 D0
☒	0022UC	01:26:26:04	00:00:04:11	DV-based 100	V1 A4 D0
☒	0023G0	01:26:30:15	00:00:04:24	DV-based 100	V1 A4 D0

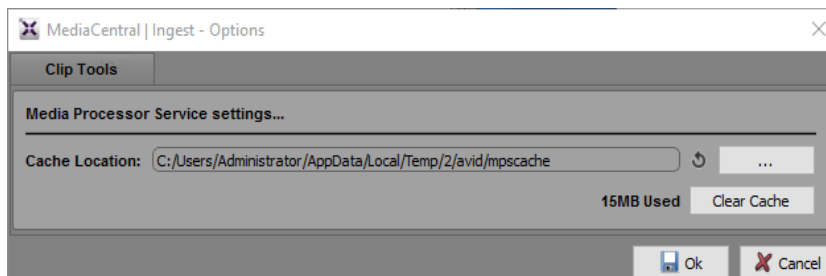
Note that with the current release of Clip Tools, new clip detection is a client feature. Information about previously viewed clips is stored on the local machine and is not retrieved from MediaCentral Production. If the same card or carrier is re-ingested from a different client, all clips will appear as new.



In the current version of Clip Tools, no asset information is retrieved from MediaCentral Production.

To clear the Clip Tools cache:

1. Select Tools > Options from the Drop Utility menu. The MediaCentral Ingest Options dialog opens.



2. Click Clear Cache and click OK.

To change the location of the cache file:

1. Select Tools > Options from the Drop Utility menu as described above.
2. Click the Navigation button (three dots) and select a new folder location.
3. Click OK.

Playing the Media Associated with a Clip

Depending on the media type and the media player installed on your local system, you can play the clip associated with a Clip. The system launches the third party media player associated with the file extension. If the clip is an .mxf file, the system launches whatever player you have associated with the .mxf extension.

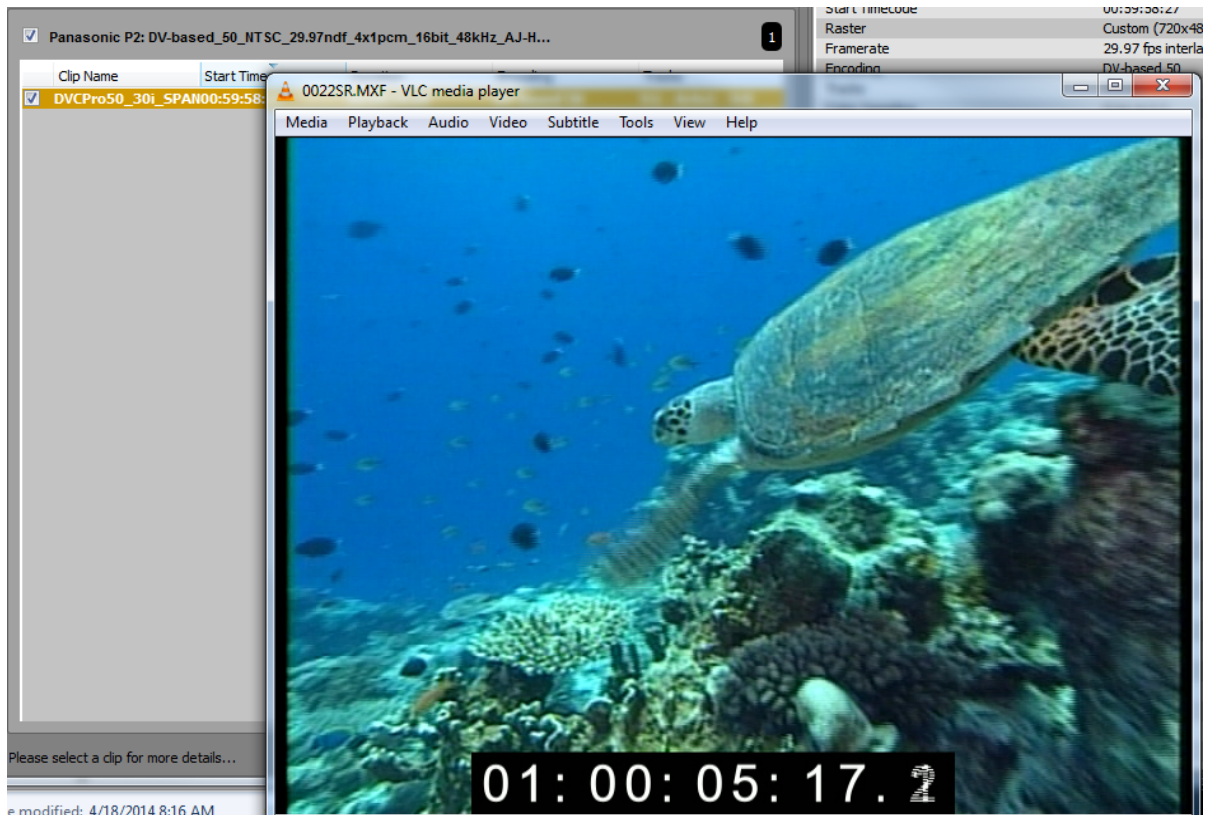


Avoid using "&" or "%" in volume paths as these characters are not handled well by MediaCentral Ingest.

To play the media associated with a clip:

1. Ensure that you have an appropriate third party media player installed on your local system. For example, depending on your file format you can use the Apple QuickTime player or the VideoLAN VLC player. Verify that the player supports your format.
2. Double-click the media file in the Clip Tools window.

The system launches the media player associated with the file extension of the clip. The following illustration shows an example using the VLC Media Player.



Limitations for Playing Clips

The playback feature is a convenience if you have an appropriate third party player installed on your local system. The following limitations apply:

- Playing a clip in the Clip Tools window is only available on Windows. Its not available on Mac OS X.
- Playback depends on the third party player you are using. For example, some players may not support the media format you are using, some may playback as black, and some may play only audio.
- Playback depends on which player is associated with the extension of the clip. For example, for an .mxf file, playback depends on which player is associated with .mxf files.

Clip Tools and MediaCentral | Ingest Processes

Clip Tools can be used with all processes that are built into MediaCentral Ingest as follows:

- When a volume is analyzed for displaying it in the Clip Tools, Avid AAF metadata is also generated. As soon as a partial volume ingest operation is started, the AAF metadata will be uploaded to the MediaCentral Ingest backend and checked into MediaCentral Production Management. This provides Avid workgroup and Media Central | Cloud UX users with information about the media currently being processed.
- The client side media processing service that powers Clip Tools can rewrap or transcode media. Rewrapping is generally fast as it uses more network/disk resources and requires less computational resources. Transcoding, however, requires more computing resources from the local client and requires suitably powered client hardware.
- If the hardware permits it, a selection of clips can be transcoded locally. For example, you can transcode a group of clips to a H.264 proxy version and upload the transcoded clips to further speed up the process, or to conserve bandwidth across a WAN link. For example, high res media can be uploaded in a parallel MediaCentral Ingest process. Once available to the backend system, the high res media can be registered there manually (via the Drop Utility) or automatically (through a MediaCentral Ingest watch folder), enabling Dynamic Relink between the proxy and the high res versions.
- For Direct Ingest via Cache, the source media is rewrapped or transcoded to the target format on the client machine. The local rewrapping/transcoding is done to reduce the amount of data that needs to be copied to the MediaCentral Ingest Engine.
- Clip Tools functionality can be combined with all MediaCentral Ingest workflows.

4

Working with MediaCentral | Ingest Profiles

MediaCentral Ingest includes a powerful profile builder that allows you to customize the way that operators interact with the Drop Utility. For details on the usefulness of this feature, see [“MediaCentral | Ingest Overview” on page 12](#). When the operator drags a volume to the Job Builder and selects a profile, he or she is presented with the options for that particular profile. The following illustration shows an example using a custom profile.



Note that the Profile Builder is currently only available in the classic MediaCentral | Ingest UI.

The screenshot displays the MediaCentral | Ingest Profile Builder interface. The interface is split into two main panes: Job Builder on the left and Profile Builder on the right.

Job Builder Pane:

- Template: Park, Register and Transcode
- Type: [Dropdown]
- Enter Episode: [Text Field]
- Enter Comment: [Text Field]
- Buttons: Cancel, Show Log, Add Job

Profile Builder Pane:

- Templates and Profiles:**

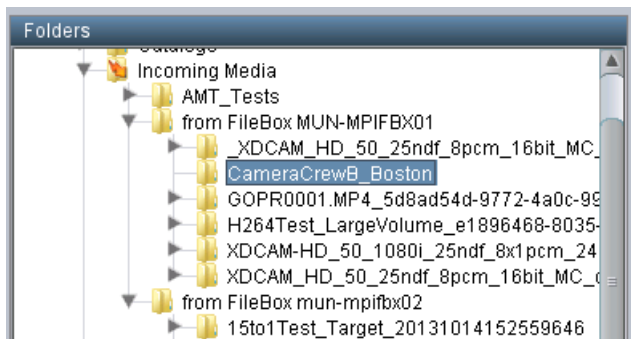
Profile Name	Original Template Name
(JCM) Direct Ingest	Direct Ingest
Direct Ingest	Direct Ingest
Direct Ingest via Cache	Direct Ingest via Cache
Hi-Res Conform From Parked Volume	Hi-Res Conform From Parked Volume
- Display Rules:**
 - Profile: Park, Register and Transcode
 - ID: c457fdc0-4f1a-4944-911e-c5af0639d917
 - Show in JobBuilder: ☒
- Widget 1:**
 - Show as: Drop Down
 - Label: Type
 - Value: XDCam,P2,QT,GoPro,Sony,UHD
- Widget 2:**
 - Show as: Text Field
 - Label: Enter Episode
 - Value: Episode 1,Episode 2,Episode 3
- Widget 3:**
 - Show as: Text Field
 - Label: Enter Episode
 - Value: Episode 1,Episode 2,Episode 3
- Comments:**
 - Label: Enter Comment
- Tool Tip Summary:**

Use this profile to park and register source volumes and then rewrap or transcode them to native Interplay media. For example, use this profile to create a proxy.
- Profile Constants:**

The illustration shows the three options that are presented to the operator in this example:

- A drop down menu to select a Camera Crew. This could be any list of items that are relevant to the project such as the days of the week or a particular camera.
- A text field that prompts the operator for the location of the shoot.
- A comments section where the operator can add notes. These notes appear later in the Interplay Access Object Inspector in the Comments column for the clip.

In this example the Camera Crew and location are used to name the folder that is created in the MediaCentral Production database to hold the metadata for the newly created clips. The following illustration shows the folder.



MediaCentral | Ingest can also create folder hierarchies in MediaCentral Production so the crew name and location in this example could be at different levels.

Note that the top level folders, in this case Incoming Media/from Filebox MUN-MPIFBX01, are defined during the configuration of the MediaCentral Ingest Engine and can be redefined by an administrator. Additional examples could include things like days of the week, opposing team, season number, episode numbers, and shoot date. See [“Modifying the MediaCentral | Production Management Configuration Parameters” on page 148](#).

Profile Options

You can use profiles to customize the following aspects of a workflow:

- The overall process that will be used by the profile. For more information, see [“About MediaCentral | Ingest Workflows and Processes” on page 23](#).
- MediaCentral Production folder name and folder structures for clip metadata
- Names of the clips that will be created as they appear in Access, in the MediaCentral Window, and in the Avid editing application.

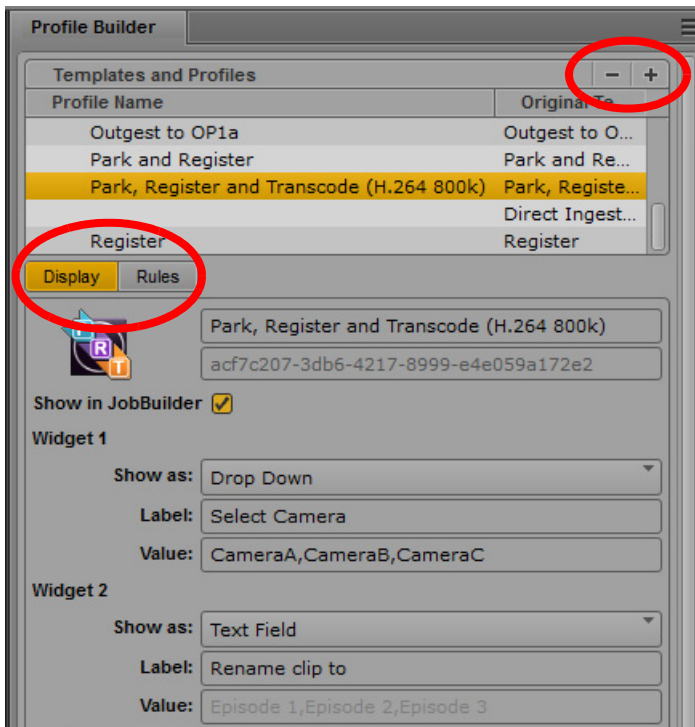
- File locations on Parking storage and ISIS Production storage.
- Resolutions for creating proxies or transcodes for higher resolutions.

When you create a profile you can create folder names, clip names and path names by building together input from the user, constants that you add to the profile, and predefined tokens such as the source volume name, system date, and camera-assigned name of the volume or clips.

Using the Profile Builder

MediaCentral Ingest ships with several pre-configured templates. Each template executes a predefined MediaCentral Ingest process. You can use the Profile Builder to create custom versions of the templates to suit your own workflows. The new profile will execute the configured process with your own custom values. For a description of the processes, see [“About MediaCentral | Ingest Workflows and Processes” on page 23](#).

The following illustrations show a template selected and shows the Display and Rules tabs for the template. The Display tab is selected. You use the plus sign button to copy a template or an existing profile. Use the minus sign button to delete a profile. Note that the default templates cannot be deleted.



Creating a copy of an existing template:

1. Select the template that you want to copy and click the plus symbol at the top of the Profile Builder pane.

The system creates a copy of the profile and adds it to the Profile list. You can copy one of the default templates or make a copy of a working profile.

2. Scroll down the Profile list to select and edit the profile.

To delete a profile:

- Select the profile and click the minus button at the top right of the Profile Builder.

Note that you cannot delete the original set of templates.

To Filter Names in the Profile List:

1. Select a profile in the list and start typing the name you wish to locate. The system will automatically filter out profiles that don't match the name.
2. To select the name that you locate, press Return.
3. To exit the Name Filtering feature, press the Esc key.

Editing the Display Tab for a Profile

The following illustration shows a copy of the Park Register and Transcode profile selected with the Display tab visible.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____

Profile Builder

Templates and Profiles

Profile Name	Original Te...
Outgest to OP1a	Outgest to O...
Park and Register	Park and Re...
Park, Register and Transcode (H.264 800k)	Park, Registe...
Register	Direct Ingest...
Register	Register

DisplayRules



Park, Register and Transcode (H.264 800k)

acf7c207-3db6-4217-8999-e4e059a172e2

Show in JobBuilder☒

Widget 1

Show as:Drop Down

Label:Select Camera

Value:CameraA,CameraB,CameraC

Widget 2

Show as:Text Field

Label:Rename clip to

Value:Episode 1,Episode 2,Episode 3

+

Widget 3

Show as:None

Label:Enter Episode

Value:Episode 1,Episode 2,Episode 3

Comments

Label:Enter Comment

Tool Tip Summary

Use this profile to park and register source volumes and then rewrap or transcode them to native Interplay media. For example, use this profile to create a proxy.

115

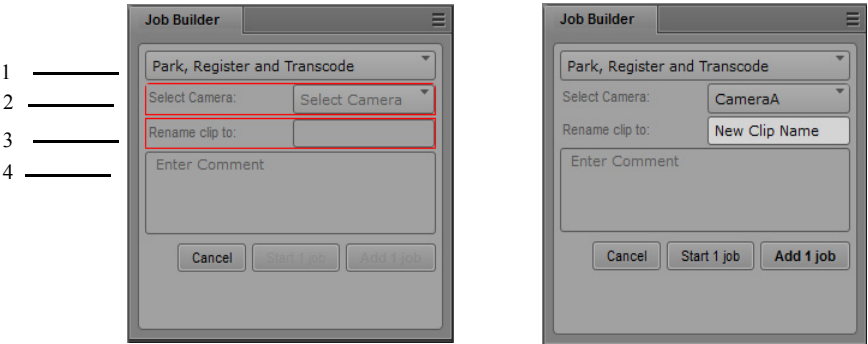
The following table describes the items in the illustration.

Option	Description
1	The selected profile
2	Display and Rules tabs. The Display tab is shown in this example.
3	Profile name and Profile icon: • Profile name. Edit the Profile name field to add a useful profile name that matches your workflow. The operator will select the name from the Profile list. • Profile icon. Each Profile template has a unique Profile icon. This helps to identify the profile after you make a copy and change the name.
4	GUID string. Each profile has a guaranteed unique identifier (GUID). The corresponding GUID is displayed for each profile but for this release the GUID is only used with Direct Ingest profiles. The GUID is used to identify or change the profile associated with a Watch folder. See “Using a Watch Folder” on page 67 .
5	Show in Job builder check box: allows to hide a given profile from being used/seen in the Job Builder. The default is checked so that the profile will be displayed in the Job Builder.

Option	Description
6 and 7	Widget 1 and Widget 2. Allows you to create user interface elements such as drop down menus, check boxes, or text fields. These elements are referred to as widgets. The resulting value is represented by {UI.Widget.1.Text} or {UI.Widget.2.Text} in the Rules tab. Modify as follows: • Select one of the following from the Show As menu: - Drop Down: operators will be presented with a menu selection of items in the Value field. - Text Field: operators can enter text in the value field. For example, this allows an operator to enter a folder name or clip name as directed. - Check Box: If the operator selects the check box, the text associated with the Value text field will be used for {UI.Widget.1.Text} or {UI.Widget.2.Text}. - None: item will not display • Label: Enter a text string to identify the widget when it is presented to the user. This example uses the text string “Select Camera” for Widget 1 and “Rename clip to” for Widget 2. • Value: - For Drop Down menu, enter a comma separated list. This example uses the values “CameraA, CameraB, CameraC”. - For Text Field, leave blank to allow the operator to enter a value. - For Check Box, enter the text that you want to appear next to the Check box. The text string will be available as part of the widget if the operator selects the check box. The text string supplied to Value will be available as {UI.Widget.1.Text} or {UI.Widget.2.Text} in the Rules tab. The values from the original template or profile are copied into the new profile. Note that if you select Text or Check Box, the original values are greyed out because they are not used by Text or Check Box.
8	Plus sign allows you to add an additional Widget. You can add up to 10 additional widgets (user values). When you add a widget a minus sign appears to allow deletion.
9	Comments field. Use this widget to allow the operator to add comments about the job. The comments will appear in Interplay Access in the Comments field of the Object Inspector. They are associated with the clip and parent folder of the clip. Text entered in the profile will appear as light colored text in the Profile. In the example, the light text will appear as “Enter Comment.” You can customize this text to prompt the operator for a certain task or information.

Option	Description
10	You can use this section to add your own online tool tip to provide instructions to the operator on how to use the profile.

The following illustration shows the profile created for this example. The illustration on the left shows the profile after the operator selects it from the Profile menu. The illustration on the right shows the completed profile. In this case the operator selected CameraA from the drop down menu and entered the text “New Clip Name” in the text field.



Option	Description
1	The selected profile
2	Drop down menu created by Widget 1 on Display tab
3	Text field input created by Widget 2 on Display tab.
4	Comment area.

Editing the Rules Tab for a Profile

You use the Rules tab to combine input collected from the operator with other predefined elements that you enter or select. This allows you to define the folder names, clip names, path names, and resolutions used by the profile. Rules are written in a token expansion format. The following illustration shows a custom profile selected with the Rules tab visible. This example uses a Park, Register, and Transcode profile.

1 —

Display Rules

2 —

Profile Constants

Constant 1:

Enter Constant 1

Constant 2:

Enter Constant 2

3 —

Registration and Copy

Interplay Folder Name:

{Profile.Name}\{System.Volume.Date.Extended}\{Source.Filesystem.Volume.Name}

Interplay Clip Name:

{Source.Metadata.Clip.Name}_{System.Clip.Increment}

Parking Storage Path:

{Profile.Name}\{System.Volume.Date.Extended}\{Source.Filesystem.Volume.Name}_{System.Volum

4 —

Interplay User Properties

+

User Property 1

Name:

clip attribute name 1

 Value:

clip attribute value 1

5 —

Transcode

Production Storage Path:

{System.Hostname}.\$System_Volume_Date_YY(){System.Volume.Date.Week}

Resolution:

AVC Long GOP 50 (Panasonic)

Edit While Capture mode: Not enabled for this resolution

Production Storage Path:

{System.Hostname}.\$System_Volume_Date_YY(){System.Volume.Date.Week}

Resolution:

AVC Long GOP 12 (Panasonic)

Edit While Capture mode: Not enabled for this resolution

6 —

Post Processing

Create Sequence:

Use global configuration

Mixdown:

Use global configuration

The following table describes the items in the illustration.

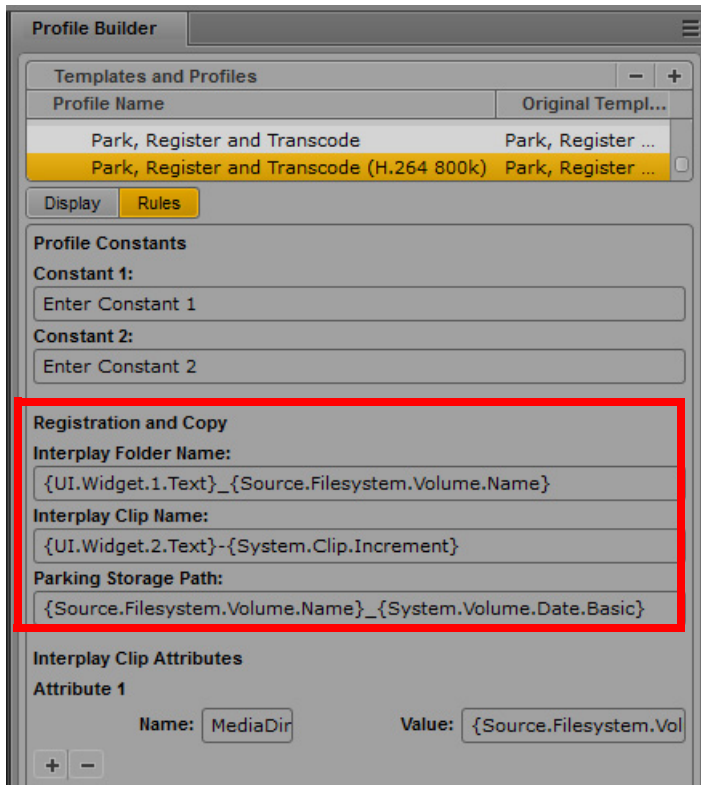
Option	Description
1	Display and Rules tabs. Rules tab is shown in this example.
2	Profile Constants. You can type in constant values that can be inserted into the folder, clip, and storage names using {Profile.Constant.1} and {Profile.Constant.2}.
3	Registration and Copy. Allows you to build names for the following: - Interplay Folder Name: the name of the Production database folder that will be used or created for the clip metadata. This folder is visible in Access and is created under the base Interplay Folder name. The base Interplay Folder name is defined during the installation and configuration of the MediaCentral Ingest Engine. To change the base path, see the parameter PamDatabaseBasePath in “Modifying the MediaCentral Ingest Engine Configuration” on page 145. - Interplay Clip Name: allows you to build a clip name. - Parking Storage Path: the storage path on the Parking storage system. The folder is created under the default Parking Storage Path folder. To change the base path, see the parameter ParkingStorageBasePath in “Modifying the MediaCentral Ingest Engine Configuration” on page 145.
4	Interplay User Properties: Allows you to create up to 10 custom MediaCentral Production user properties on ingested clips. The value the user enters becomes a custom property in the Interplay database. You can view the value as a custom property column in Interplay Access

Option	Description
5	Transcode. Allows you to build names for the Production ISIS/NEXIS path and select a transcode resolution. Note that there are two storage path and two resolution choices. This allows you to use the same profile to transcode to two different resolutions. For example, a high resolution and a proxy resolution. • Production Storage Path: the storage path on the Production ISIS/NEXIS. The folder is created under the base Production storage folder. To change the default, see the parameter PamISISBasePath in “Modifying the MediaCentral Ingest Engine Configuration” on page 145.  <i>ISIS shared storage has a manageable file count limit. In an effort to limit the amount of files that are generated in each folder, we have changed the default template to use “{System.Hostname}.\$System_Volume_Date_YY() {System.Volume.Date.Week}”. This creates a new folder on the shared storage workspace as the year and week of year change. (For Example: \burl-md-03-vm.1610)</i> • Resolution: select a resolution from the menu.  <i>You can specify two different Transcode resolutions in separate subfolders under the base Production ISIS folder.</i> • For the following profile types, Edit While Capture (EWC) mode can be used for the first resolution: - Direct Ingest - Direct Ingest via Cache - Ingest from OP1a The default for this setting is “disabled,” but it can be explicitly enabled or disabled as needed on a per profile basis. For additional information on Edit While Capture (a.k.a. “Frame Chase Capture” and “in-progress clips”), see the section on “Frame Chase Capture” in the <i>Media Composer Editing Guide</i> on the Avid Knowledge Base.

Option	Description
6	Post Processing: This contains two sections for creating and mixing down sequences. Create sequence: Allows you to override the server side setting CreateSequenceForRegisteredClips on an ingest profile level (profiles where a register step is involved). Values are as follows: - Use global configuration: When set, this will honor what is set in the System Administrator web page for the CreateSequenceForRegisteredClips and CreateSequenceForTranscodedClips settings for all profiles configured for Use global configuration. See “Modifying the Workflow Foundation Parameters” on page 154. - Create linked sequence of all clips: This will link the sequence to the AMA or linked sources. - Create native sequence of all clips: This will link the sequence to the OpAtom or native sources. - Create both linked and native sequences of all clips: This will create 2 sequences (1 linked to the linked sources and 1 to the native sources). - Do not create sequence: This will not create a sequence no matter what the admin webpages are set to.  <i>In the case of the sequence creation with Direct Ingest via Cache there is no create linked sequence of all clips option listed since there's no AMA source to link to.</i>  <i>In the case of the sequence creation with Park and Register, and Register there is no create native sequence of all clips sine there's no transcode operation that takes place.</i> Mixdown allows you to splice masterclips together while processing a volume. This requires a MediaCentral Transcode application to be running in the environment. The result is a master clip that encompasses all master clips from the volume. The following options are available: - Mixdown source to new masterclip: This will use the Transcode service and mixdown the source so it becomes one master clip of all clips. - Do not mixdown: This instructs the profile to not mixdown the source, no matter what the global setting is set to. - Use global configuration: When set, this will honor what is set in the System Administrator web page for the CreateMixdownForTranscodedClips settings for all profiles configured for Use global configuration. See “Modifying the Workflow Foundation Parameters” on page 154

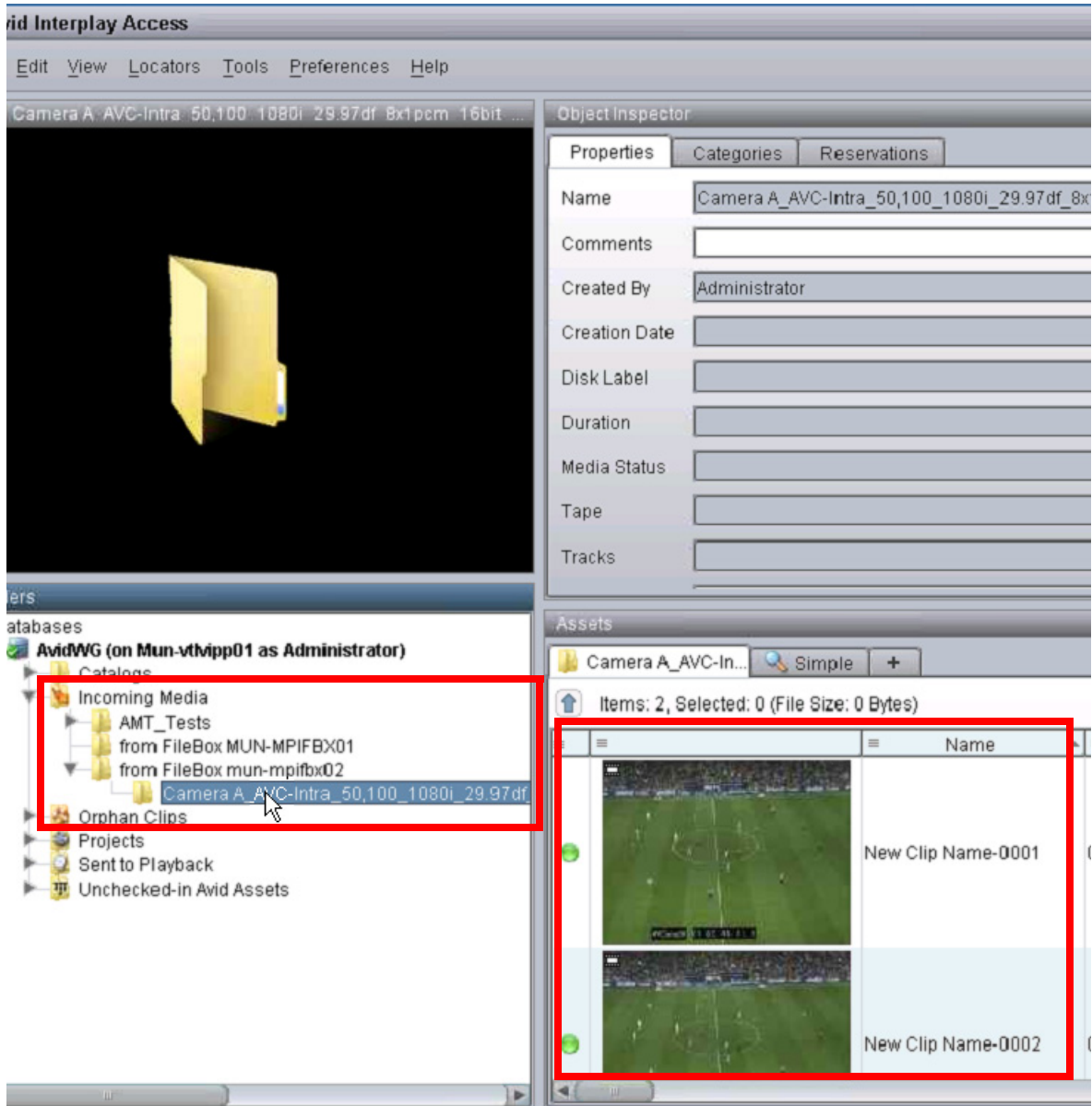
Entering Token Values

You can build a rule for a Profile value by entering tokens. This allows you to dynamically create the name of the Production folder, the name of the captured clips or the UNC paths to a storage location. For example, the following illustration uses the {UI.Widget.1.Text} and {UI.Widget.2.Text} values shown in the previous example. As mentioned earlier, these two tokens take their values from Widget 1 and Widget 2 on the Display tab. In this example, these values are used to create the Production folder name and clip name.



Two additional tokens are used in the above illustration. {Source.Filesystem.Volume.Name} is added to complete the Production folder name and {System.Clip.Increment} is added to complete the Clip Name and add a unique number to the name. For a description of the available token values, see [“Token Value Reference” on page 127](#).

In this example, the operator entered “New Clip Name” for the corresponding user value. As a result, clips are named New Clip Name-0001, New Clip Name-0002, etc. The following illustration shows the new folder and clips in Access after the ingest operation. Notice the Production folder name and the clip names.



The Production folder name in the above illustration is "Camera A_" plus the name of the source volume. The clip names begin with "New Clip Name-" and have an incremented number added to the name.

To enter tokens on the Rules tab:

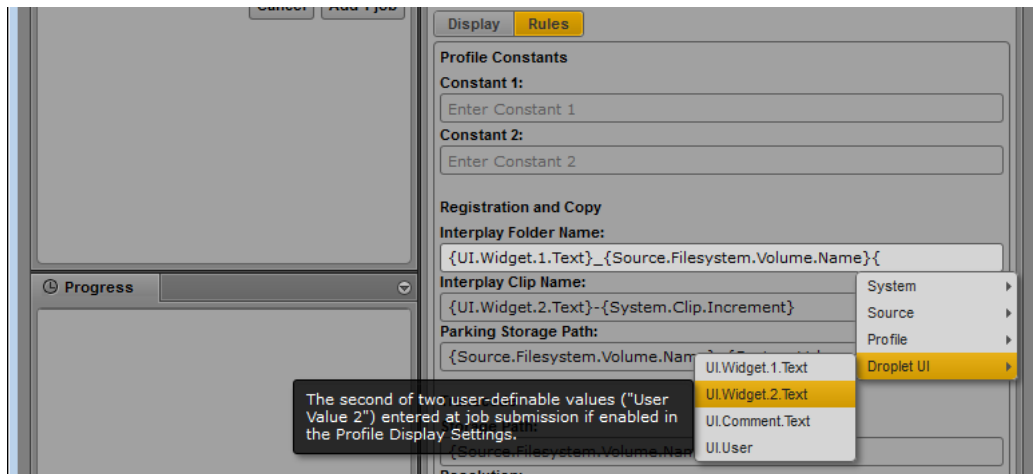
1. Do one of the following:
 - Type in the text for the token.
 - Type in the first curly brace for the token and use either the mouse or arrow keys to select the token value from a menu.

To use the mouse or arrow keys to select a token value:

1. Click in the token text field. The field changes to a lighter color to indicate that you can enter values.
2. Type in a left curly brace ({). The system displays a popup menu.
3. Use the mouse or the arrow keys to navigate through the menu.
4. When you navigate to the value you want, do the following:
 - If using the mouse, click the value you want to select.
 - If using the arrow keys, click the Tab key to select the value.

The system enters the token into the text field. When you click off the text field the system saves the value.

Note that if you use the mouse to navigate the menu and hover over the token value, the system displays a tool tip describing the value as shown in the following illustration.



Using the menu to select a token has the added benefit that the system will only present tokens that are valid for that text field. For example, clip name tokens are not valid in a path name.

Additional Tokens for Interplay Clip Name Field

Starting at Media Director v1.3, the following tokens are now available in the Production Clip Name field:

- Source.Filesystem.Volume.Path.<n>
- Source.Filesystem.Volume.Parent

These tokens have now also been enabled for use in the Production Clip Name building rule. This allows you to use token rules such as the following:

```
{Source.Filesystem.Volume.Parent}_{System.Clip.Increment}
```

This rule names clips in a volume after the containing folder with an appended number. For example, 100 clips in a volume/folder named ‘Dailies’ would result in clip names Dailies_0001 to Dailies_0100 being created.

In a similar manner, the {Source.Filesystem.Volume.Path.<n>} token can be used to name clips after using other parts of the folder hierarchy. For example, for the following source disk structure:

```
E:\Dailies\Day1\Clip1, Clip2
```

an Production Clip Name rule in the following form

```
{Source.Filesystem.Volume.Path.1}_{Source.Filesystem.Volume.Path.2}_{System.Clip.Increment}
```

would create clips of the form Dailies_Day1_0001 etc.

Creating Folder Structures

The base paths defined when you install and configure MediaCentral Ingest set the initial folder structures. For additional information, see [“Modifying the MediaCentral | Production Management Configuration Parameters” on page 148.](#)

You can define additional folder levels by adding back slashes on the Rules tab of the Profile Builder. The following illustration uses the Constant 1 and Constant 2 values to define folder levels that are used each time the profile is run. The third level folder name is entered by the operator. See User Value 2 on the Display tab.

Note that the ability to create folder structures is especially useful for creating structures on the parking storage that help you to organize your source media. For example, you could build a storage rule that organizes all media that gets parked for a specific production under a root folder named after this production. And you could create additional substructures using the “user

value” parameters to reflect the shooting date. In combination with MediaCentral Ingest’s automatic folder traversal, this would allow you to bring an additional resolution online for your entire production or a specific date by simply dropping the production or date folder.

The screenshot shows the Profile Builder interface with the 'Rules' tab selected. The main configuration area on the left includes a 'Display' button, a profile name 'Park, Register and Transcode', a GUID 'c457fdc0-4f1a-4944-911e-c5af0639d917', and a 'Show in JobBuilder' checkbox. Below this are three widgets: Widget 1 (Drop Down, Select Camera, CameraA,CameraB,CameraC), Widget 2 (Text Field, Interplay Folder Name, Episode 1,Episode 2,Episode 3), and Widget 3 (None, Enter Episode, Episode 1 Episode 2 Episode 3). A 'Comments' section with 'Enter Comment' and a 'Tool Tip Summary' are at the bottom left. The right-hand panel has a 'Profile Constants' section with 'Constant 1: MyProjectName' and 'Constant 2: Season1'. Below that is the 'Registration and Copy' section with 'Interplay Folder Name: {Profile.Constant.1}\{Profile.Constant.2}\{UI.Widget.2.Text}', 'Interplay Clip name: {UI.Widget.1.Text}_{Source.Metadata.Clip.Name}', and 'Parking Storage Path:'.

Token Value Reference

The following table describes the tokens that are available in the Rules tab.

Token Name	Description	Example
System values		
System.Volume.Date.Basic	System date at job run time (in ISO 8601 basic format).	20140113
System.Volume.Date.Extended	System date at job runtime (in ISO 8601 extended format).	2014-06-11
System.Volume.Time	System time at job runtime (in ISO 8601 basic format).	134730
System.Volume.GUID	System generated GUID (Globally Unique Identifier) for a volume.	ff571ad1-9e5f-4796-a9a7-e28e6a490fcb

Token Name	Description	Example
System.Clip.GUID	System generated GUID (Globally Unique Identifier) for a clip.	
System.Volume.TimeStamp	A timestamp presented in yyyyMMddHHmmssfff format. This format provides a compact timestamp containing milliseconds that can be used to create volume names that are unique on parking storage.	20130113134730456
System.Volume.TimeStamp. UserFriendly	A compact, formatted date/time string representation that is easier to read than the Volume.Timestamp format. A timestamp presented in yyyy-MM-ddTHH\hmm format.	2014-04-05T14h30
System.Volume.Date.Week	The date tokens support storage organization and workflows where incoming media is organized by day and week schemes. Using this type of organization in the proxy path allows you to limit the number of media files per folder on the proxy workspace. You can use these tokens together with System.Hostname. This format displays the week in two-digit notation. For example, Nov 2nd, 2013 (week 49) would evaluate to '49'.	The 49th week of the year would resolve simply to 49.
System.Volume.Date.DayOfWeek	The day in two-digit notation. For example, Nov 2nd, 2013 (Saturday) would evaluate to '06'.	Saturday, the 6th day of the week, would evaluate to '06'.
System.Volume.Date.Month	The month, in two-digit notation. For example, Nov 2nd, 2013 would evaluate to '11'.	The 11th month of the year would evaluate simply to '11'.
System.Hostname	The hostname of the MediaCentral Ingest server. This token can be used to create proxy media paths containing the host name of the creating device. This is a standard operating procedure in Interplay.	burl-md-01
System.Clip.Increment	A number that will increment for every clip in a volume. For example, OpeningDay0001, OpeningDay0002, etc.	OpeningDay0001
Source values	Source values are derived from the source volume.	
Source.Filesystem.Volume.Name	Name of the volume as it appears in the operating system.	CONTENTS

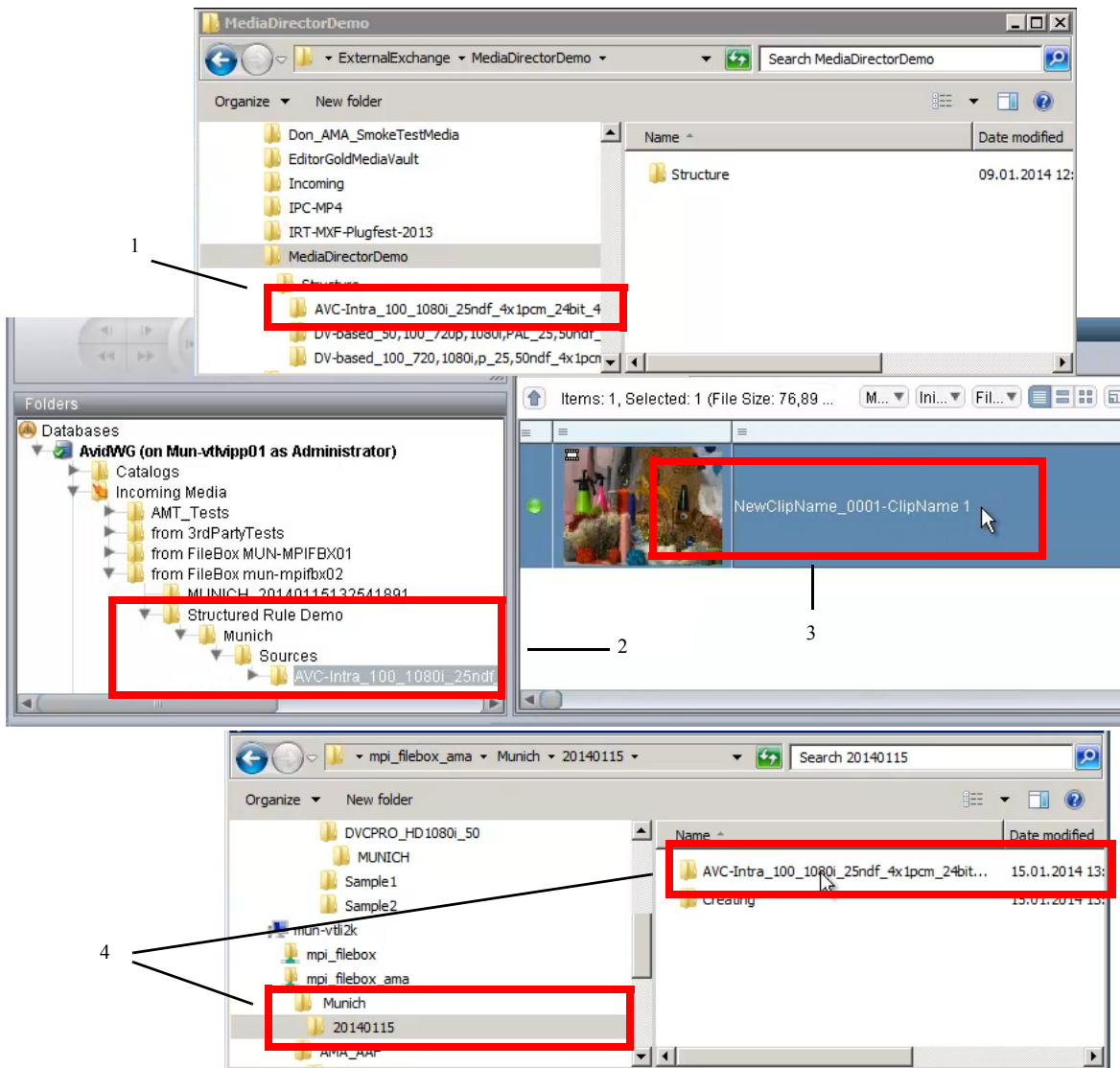
Token Name	Description	Example
Source.Filesystem.Volume.Path <n>	File system path segment number n, extracted from the operating system volume path,	textstring\volume1
Source.Filesystem.Volume.Path.ex0	Explicit path to the volume as it appears in the operating system, with the first segment removed. (The first segment is typically the drive letter.) This is useful for replicating source media file system hierarchies under a different target path.	CONTENTS
Source.Filesystem.Volume.Parent	Operating system path to the folder containing the volume. If there is no parent folder, the token is empty.	F:\textstring
Source.Metadata.Volume.Name	Camera-assigned name of the volume as provided by AMA (Avid Media Access) at job runtime. Available for Production folder names and clip names.	XDCAMDISC
Source.Metadata.Clip.Name	Camera-assigned name of a clip as provided by AMA (Avid Media Access).	My Favorite Clip
Source.Metadata.Clip.VideoID	Camera-assigned ID of a clip as provided by AMA (Avid Media Access)	
Profile values	Profile values are derived from information contained in the (XML) profile itself.	
Profile.Name	Name of the Profile used to process a volume(s) or clip(s).	Default profile
Profile.Constant.1	The first constant ('Constant 1') defined as a part of a Profile.	ProjectA
Profile.Constant.2	The second constant ('Constant 2') defined as a part of a Profile. Note that these constants can be used to simplify the “duplication” or cloning of profiles. For example, you can set up your rules using a constant such as a production number. To create a profile for a new production number, simply clone the profile and modify the constant to contain the new number.	Season2
Droplet UI values	User (operator) supplied values	
UI.Machine	The name of the client machine that starts an ingest operation.	

Token Name	Description	Example
UI.Widget.1.Text	The first of two user-definable values (Widget 1) entered at job submission if made available in the Profile Display settings.	MyClipName
UI.Widget.2.Text	The second of two user-definable values (User Value 2) entered at job submission if made available in the Profile Display settings.	Shooting1
UI.User	The name of the logged in user as it appears in the OS (Operating System). For example, this can be used to group incoming media under the name of the ingesting user.	amiller
XML File values	Using the Xpath expression you can navigate to an XML file that contains metadata for a media file or volume.	
xpath((xmlfile,xpath)	Supply the path to the file using the “xmlfile” variable. Identify the node containing the information in the “xpath” variable. The function returns the data contained in the xml node. See “Using XPath Tokens to Pull Text from an XML File” on page 83.	

Park and Register Example

This example creates a profile that copies a selected volume to parking storage and registers the clips with the MediaCentral Production Management database.

The following illustration shows the source volume used in this example and the new clip and folder structures created by running the profile. In this example the source volume is a folder.

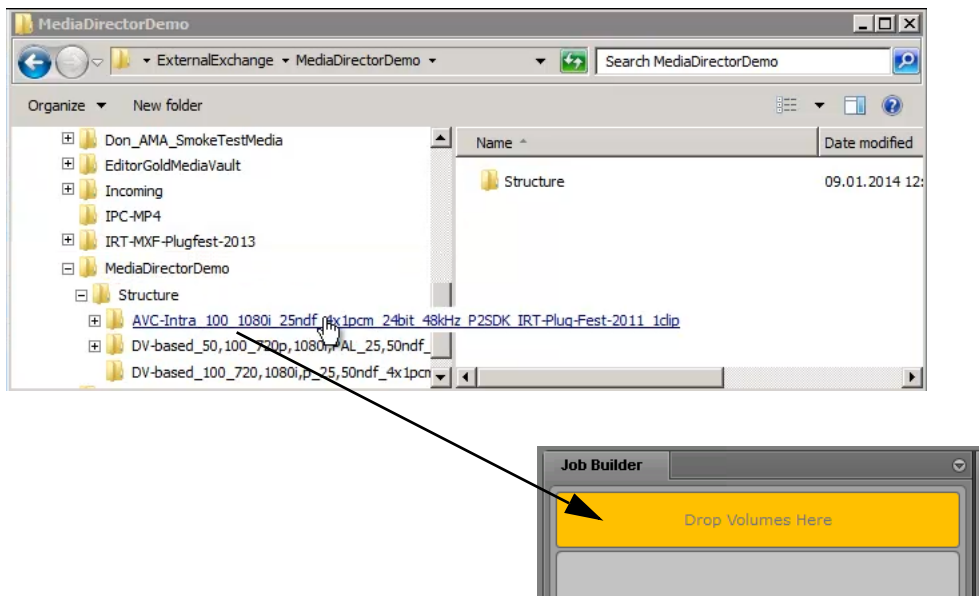


Option	Description
1	The source volume used in this example.
2	The folder structure created in the Production database.
3	Clip name in the Production database.
4	The folder structure created on the parking storage system.

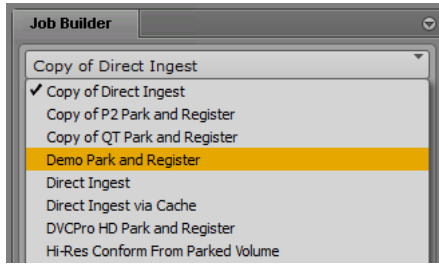
Note that the source folder name is carried through to the final Production folder name and to the parking storage folder name. This shows one way to use profiles to organize your media.

To add the job to the Job Builder and select a profile:

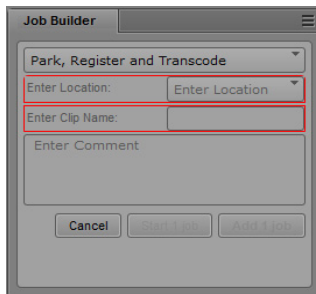
1. Drag the source volume onto the Drop Volumes Here portion of the Job Builder tab.



2. Select the profile you want to use. In this case, Demo Park and Register.

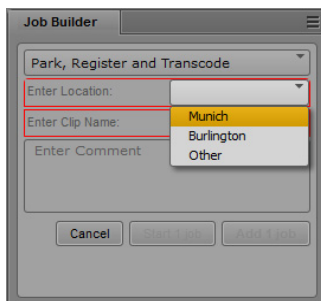


The system displays the profile and also displays any text widgets associated with the profile. This example has a drop down menu to select a location (where the footage was recorded in this example) and a text entry box to enter a clip name.

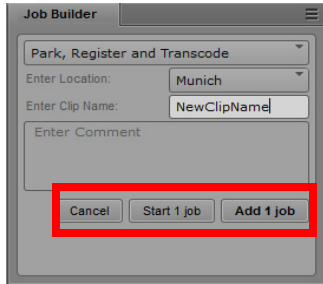


To enter the requested values and start processing the job:

1. This profile asks you to select a location and to enter a clip name. Select the location from the drop down menu.

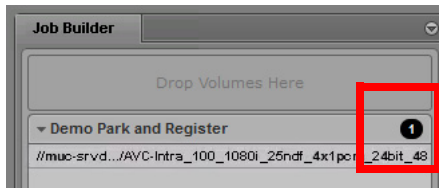


2. Enter a clip name in the text box and click the “Add 1 job” button. In this example the user enters “NewClipName.” The Add job button will have different numerical values depending on the number of jobs.

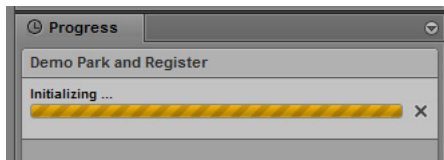


The job is added to the Job Builder queue.

3. Right-click the job and select Start. You can also right click the number and select Start All. If multiple jobs were queued you could start them all this way.



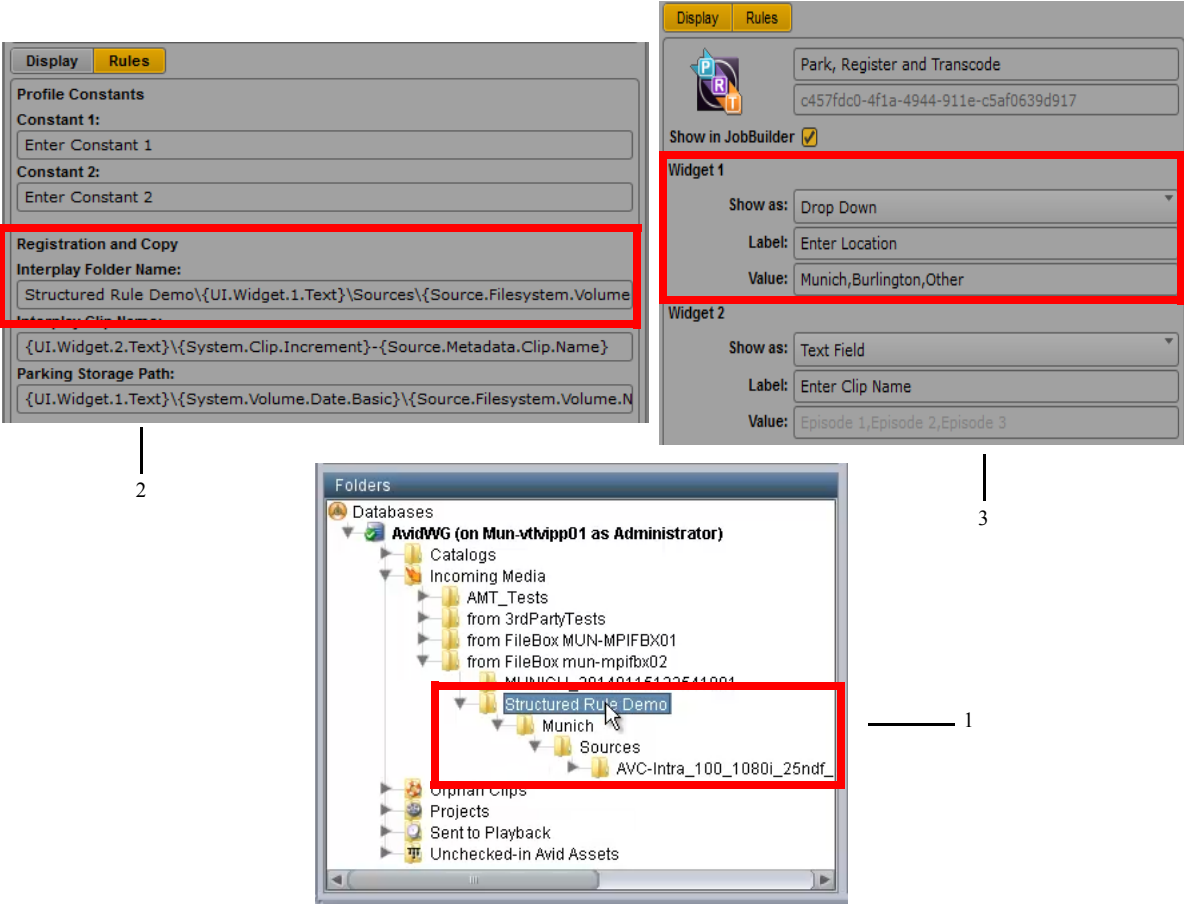
MediaCentral Ingest begins processing the job.



The remainder of this section describes how MediaCentral Ingest uses the values to create folder structures and clip names for the finished job.

Defining the MediaCentral Production Management Folder Structure

The following illustration shows the folder structure created in Access and the profile sections used to create the folder structure. Note that the {UI.Widget.1.Text} token is defined as “User Value 1” in the Display Window. In this case it is defined as a selection from a drop down menu.



Option	Description
--------	-------------

- | | |
|---|--|
| 1 | Final folder structure in the Interplay database. |
| 2 | The Interplay Folder Name value used in this example is defined as follows:
Structured Rule Demo\{UI.Widget.1.text}\Sources\{Source.Filesystem.Volume.Name}
Compare this string to the Production folder structure to see how the profile values are used. |
| 3 | The User Value 1 (Widget 1) area of the profile defines the value for {UI.Widget.1.text}. In this example, User Value 1 defines a drop down menu with the following choices: Munich, Burlington, and Other. The user selected Munich from the drop down menu. |

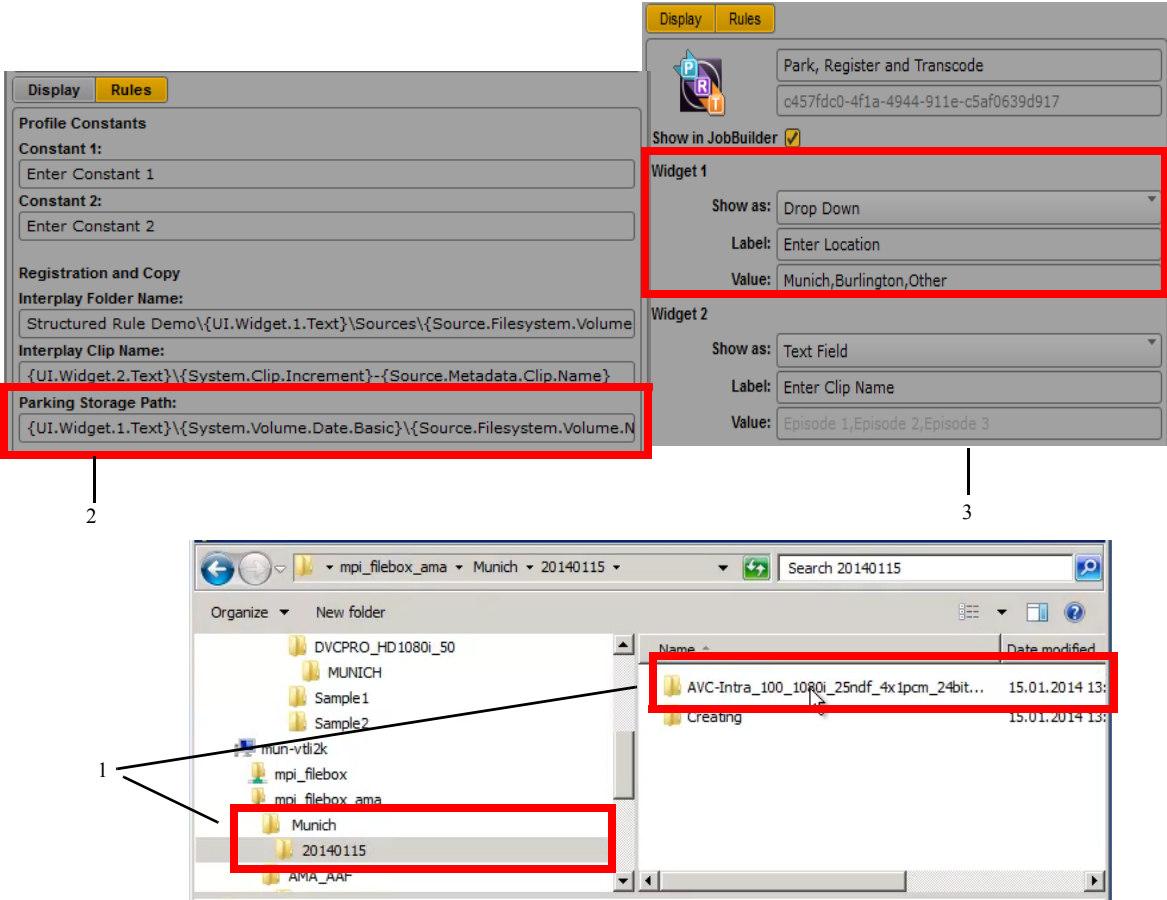
In the above illustration you can see that the Interplay folder structure created by the profile starts at the following directory:

Incoming Media\from Filebox mun-mpifbx02

This value is defined when you install the MediaCentral Ingest Engine and can be modified at a later time. See [“Modifying the MediaCentral | Ingest Engine Configuration”](#) on page 145.

Defining the Parking Storage Folder Structure

The following illustration shows the parking storage folder structure and the profile sections used to create the folder structure.



Option	Description
--------	-------------

- | | |
|---|---|
| 1 | Final folder structure on the parking storage system. Notice that the original source volume name is used as the final folder name. |
|---|---|

Option	Description
2	The Storage Path value used in this example is defined as follows: {UI.Widget.1.text}\\System.volume.Date.Basic}\\{Source.Filesystem.Volume.Name} Values are defined as follows: • The user selected Munich from a popup menu when he or she ran the job. That is the value used for {UI.Widget.1.text}. • The system added the System date at run time. This value is 20140115. • The system used the name of the source volume for the final level in the folder structure.
3	User Value 1 defines the value for {UI.Widget.1.text}. This is the same value used for the Interplay Folder Name part of the profile in this example.

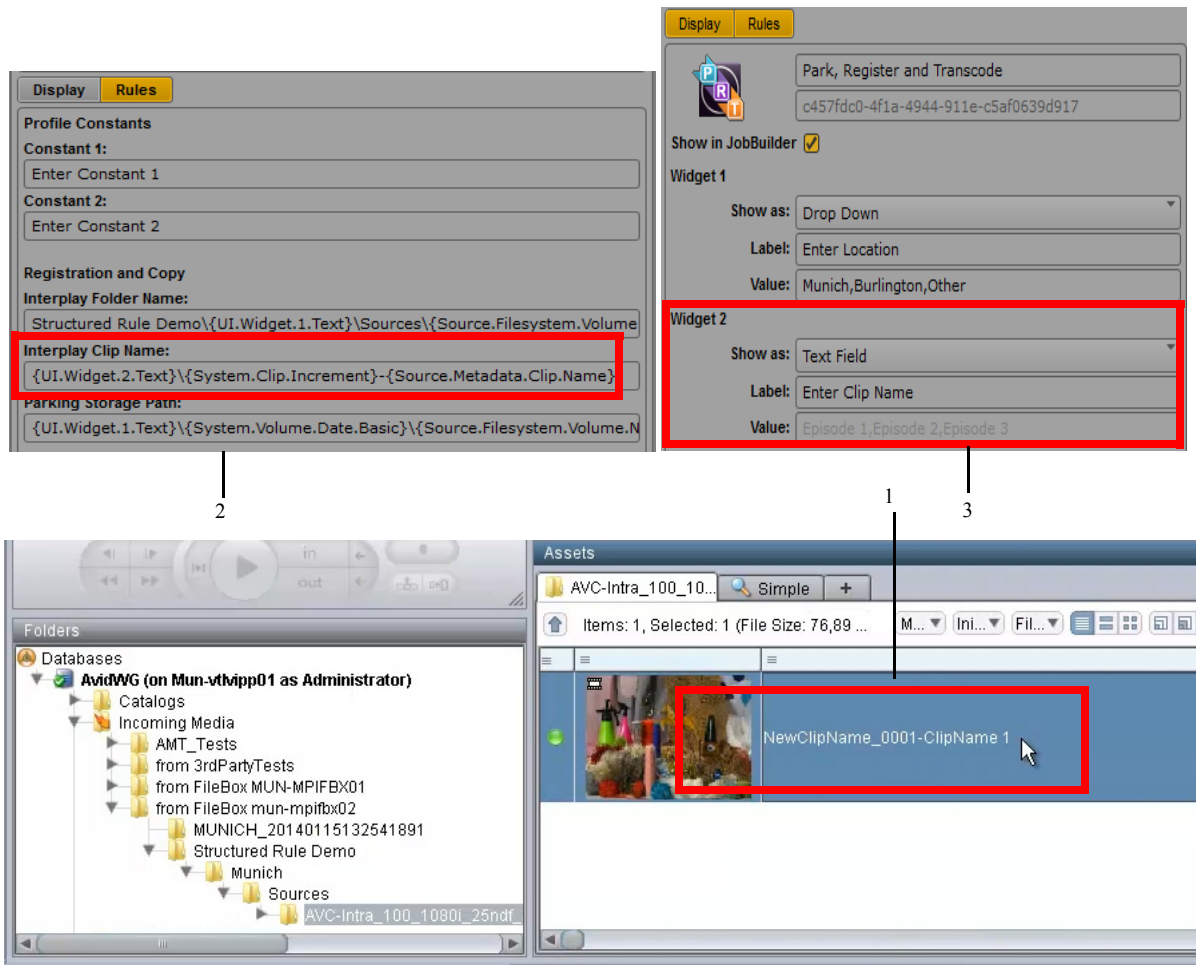
In the above illustration you can see that the parking storage folder structure created by the profile starts at the following directory:

\\muc_vtli2k\mpi_filebox_ama

This value is defined when you install the MediaCentral Ingest Engine and can be modified at a later time. See [“Modifying the MediaCentral | Ingest Engine Configuration” on page 145](#).

Defining the Clip Names in the MediaCentral Production Management Database

The following illustration shows the newly created clip displayed in Access and the profile sections used to create the name.



Notice in the above illustration that there are greyed-out values in the Value section for User Value 2. These values are carried over from the original profile and are not used by the Text Field element.

Option	Description
1	Clip name in the Production Management database.

Option	Description
2	The Interplay Clip Name value used in this example is defined as follows: <code>{UI.Widget.2.text}_ {System.Clip.Increment} - {Source.Metadata.Clip.Name}</code> The final name is created as follows: • The user entered “NewClipName” and that was used for <code>{UI.Wdige.2.text}</code> • The system added an increment to the name. This was the first clip so the value 0001 is assigned. • The name of the source clip (ClipName1) was added as the final portion of the name. This is the camera-assigned name of the clip as provided by AMA.
3	User Value 2 defines the value for <code>{UI.Widget.2.text}</code>. In this example the user entered “NewClipName.”

Using Token Functions

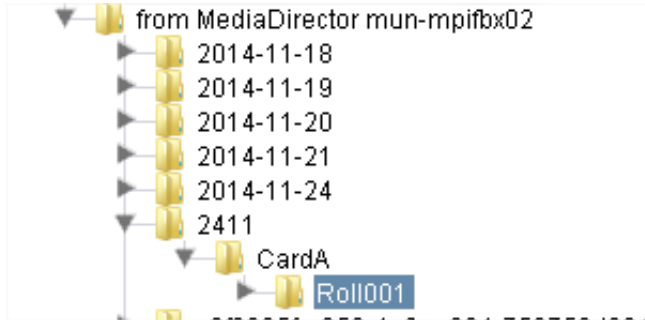
Starting at Media | Director v1.1, you can use several built in functions to extract information from a folder or volume name. For example, assume that a site always uses a volume name that contains specific information such as the following:

2411A001

where:

- The first 4 characters are the day and month (2411 stands for November 24th in this example)
- The fifth character is the media Card (A in this example)
- The last three characters are the Roll number (001 in this example)

The token `<Source.Filesystem.Volume.Name>` will pick up the volume name, but instead of having one folder named 2411A001, it would be better to automatically create the folder structure identified in the following illustration.



You can use a substring token function to extract the information from the volume name and use it to create the folder structure.

Token Functions

The following token functions are supported in MediaCentral Ingest.

Substring

Extracts parts of a string, beginning at the character at the specified position, and returns the specified number of characters. Returns a new string containing the extracted characters

`substr(inputString, startPosition, length)`

where:

- `inputString`: The input string. For example, use the token `Source.Filesystem.Volume.Name`.
- `startPosition`: Required. The position in the string to start the extraction. The first character is at index 0.
- `length`: Optional. The position (up to, but not including) in the string to end the extraction. If omitted, it extracts the rest of the string.

Example 1:

`$substr({Source.Filesystem.Volume.Name},0,4)`

Extract the first 4 characters from the string identified by the token `Source.Filesystem.Volume.Name`.

If `Source.Filesystem.Volume.Name` = 2411A001, the function returns 2411.

Example 2:

`$substr({Source.Filesystem.Volume.Name},0,4)\Card$substr({Source.Filesystem.Volume.Name},4,1)\Roll$substr({Source.Filesystem.Volume.Name},5,3)`

If `Source.Filesystem.Volume.Name = 2411A001`, this example creates the following folder structure:

2411\CardA\Roll001

Length

Returns the length of a string (number of characters). The length of an empty string is 0.

`length(inputString)`

where:

- `inputString`: The input string. For example, use the token `Source.Filesystem.Volume.Name`.

Example:

`$length({Source.Filesystem.Volume.Name})`

If `Source.Filesystem.Volume.Name = 2411A001`, the function returns 8.

System_Volume_Date_YY

Returns the current year of the system's date stamp in YY format.

Example:

`$System_Volume_Date_YY()`

If the current date is 2016-03-04, the token function returns 16.

Split

Returns the nth substring of a string.

`split(inputString, splitChar, elementNumber)`

where:

- `inputString`: The input string. For example, use the token `Source.Filesystem.Volume.Name`.
- `splitChar`: A single character that is used as separator within the `inputString`. For example `'_'`.
- `elementNumber`: A 0-based index of the element that should be returned as a result of splitting the `inputString` by `splitChar`

Example:

```
$split({Source.Filesystem.Volume.Name},_,1)\Card$split({Source.Filesystem.Volume.Name},_,2)\Roll$split({Source.Filesystem.Volume.Name},_,3)
```

If `Source.Filesystem.Volume.Name = Recording_2411_A_001`, this example creates the following folder structure:

```
2411\CardA\Roll001
```

In this example an underscore is used as the split character.

sanitizeFilename

Replaces characters in the `inputString` that are illegal or unsafe for filenames. Unsafe characters are either removed or replaced by a character set in the replacement.

Illegal Characters on various operating systems: `/ ? < > \ : * | "`

Unicode control codes: `C0 0x00-0x1f & C1 (0x80-0x9f)`

Reserved filenames on Unix-based systems (`."`, `".."`)

Reserved filenames in Windows (`"CON"`, `"PRN"`, `"AUX"`, `"NUL"`, `"COM1"`, `"COM2"`, `"COM3"`, `"COM4"`, `"COM5"`, `"COM6"`, `"COM7"`, `"COM8"`, `"COM9"`, `"LPT1"`, `"LPT2"`, `"LPT3"`, `"LPT4"`, `"LPT5"`, `"LPT6"`, `"LPT7"`, `"LPT8"`, and `"LPT9"`)

Truncated to 255 characters in length.

```
sanitizeFilename(inputString, replacement)
```

where:

* `inputString`: The input string. For example, use the token `{Source.Metadata.Clip.VideoID}`

* `replacement`: a replacement character. Can be empty, then illegal or unsafe characters are removed.

Examples

Removes unsafe characters in the Video ID.

```
$sanitizeFilename({Source.Metadata.Clip.VideoID},)
```

Replaces unsafe characters in the Video ID with `"_"`

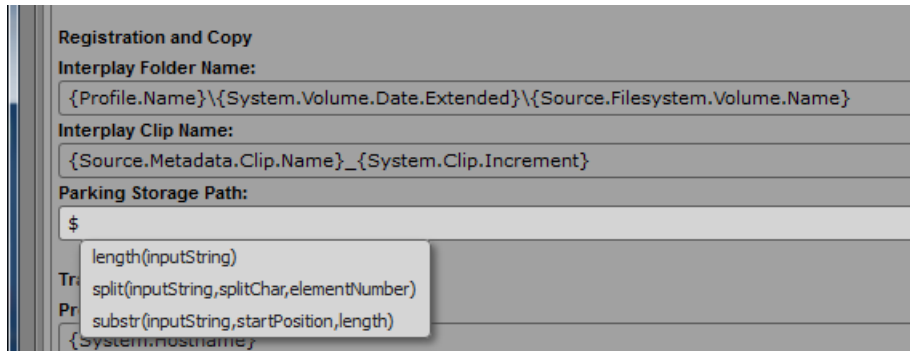
```
$sanitizeFilename({Source.Metadata.Clip.VideoID},_)
```

Entering Token Functions in the Profile Builder

There are several ways to enter the token functions into the Profile Builder text box. Here is one method.

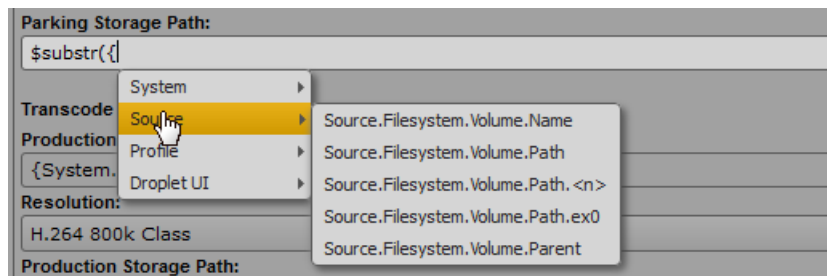
To enter functions into the Profile Builder:

1. Type a \$ and system shows the syntaxes that are available



Make note of the syntax and parameters.

2. Type the function name and a left parenthesis “(“. Then type a left bracket “{“ to see the available tokens.



3. Select a token to use as an input string in the function. Then enter the remainder of the parameters. Do not add any spaces in between the parameters.
4. Click off the text field to save the text. The following illustration shows the completed function.

Registration and Copy
Interplay Folder Name:
{Profile.Name} \ {System.Volume.Date.Extended} \ {Source.Filesystem.Volume.Name}
Interplay Clip Name:
{Source.Metadata.Clip.Name} _ {System.Clip.Increment}
Parking Storage Path:
\$substr({Source.Filesystem.Volume.Name},0,4)

5. Enter any additional text or functions as necessary to complete the path. Use “\” to identify a new level in the folder structure hierarchy.

5 Modifying the MediaCentral | Ingest Engine Configuration

This chapter covers the following topics:

- [Accessing the MediaCentral | Ingest Administration Overview](#)
- [Modifying the MediaCentral | Production Management Configuration Parameters](#)
- [Modifying the Workflow Foundation Parameters](#)
- [Modifying the Watch Folder Parameters](#)
- [Changing the Profile Associated with the Watch Folder](#)
- [Changing Additional Parameters for the Watch Folder](#)
- [Restarting a Service](#)
- [Enabling and Disabling Rewrapping Workers](#)
- [Changing System Settings](#)

A MediaCentral Ingest Engine should normally be installed on a fresh operating system, unless an existing MediaCentral Ingest system is being upgraded. During the installation, all required configuration parameters are entered in the installation wizard.

The MediaCentral Ingest installer will set up the complete system for you, there is no need to install any additional software apart from the qualified AMA plugins and Apples's QuickTime software libraries. You can omit the vulnerable QuickTime player.

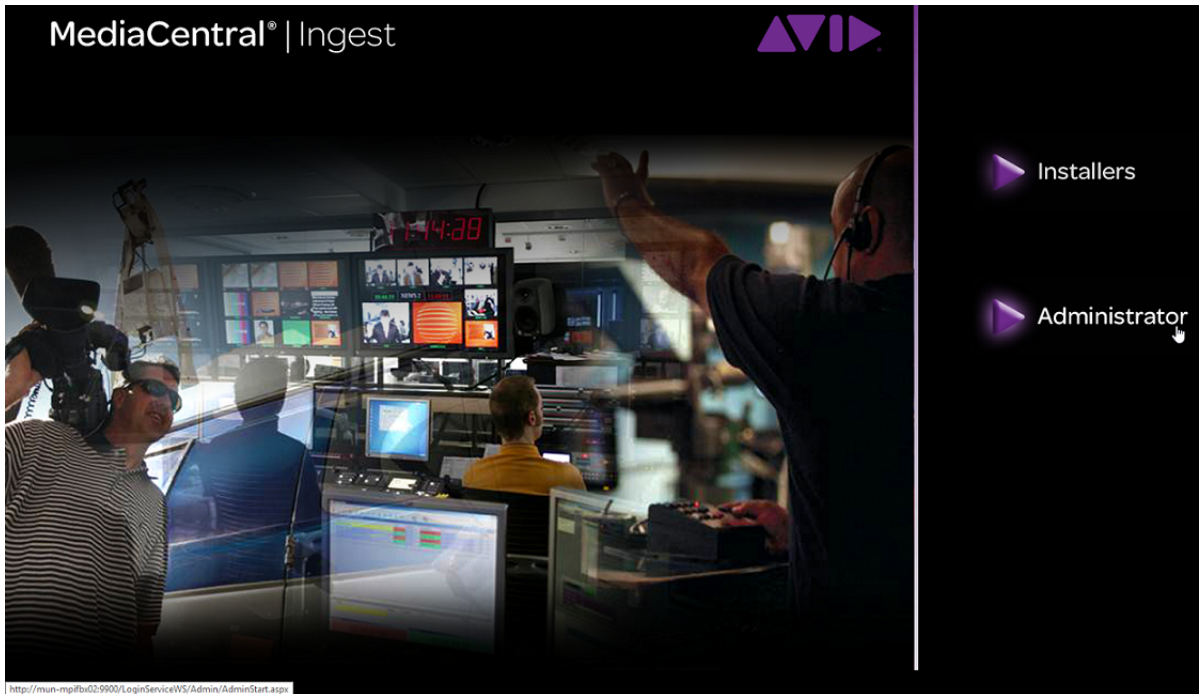
If a MediaCentral Ingest Engine needs to be reconfigured, for example because it has been moved to a different system environment, or you want to change the parameters entered during installation, you can use the MediaCentral Ingest Engine System Administrator. As the name suggests, the MediaCentral Ingest Administrator pages are intended for use by administrators. You need to log in with a user name and password.

Accessing the MediaCentral | Ingest Administration Overview

The Administration Overview is required for several of the procedures described in this chapter.

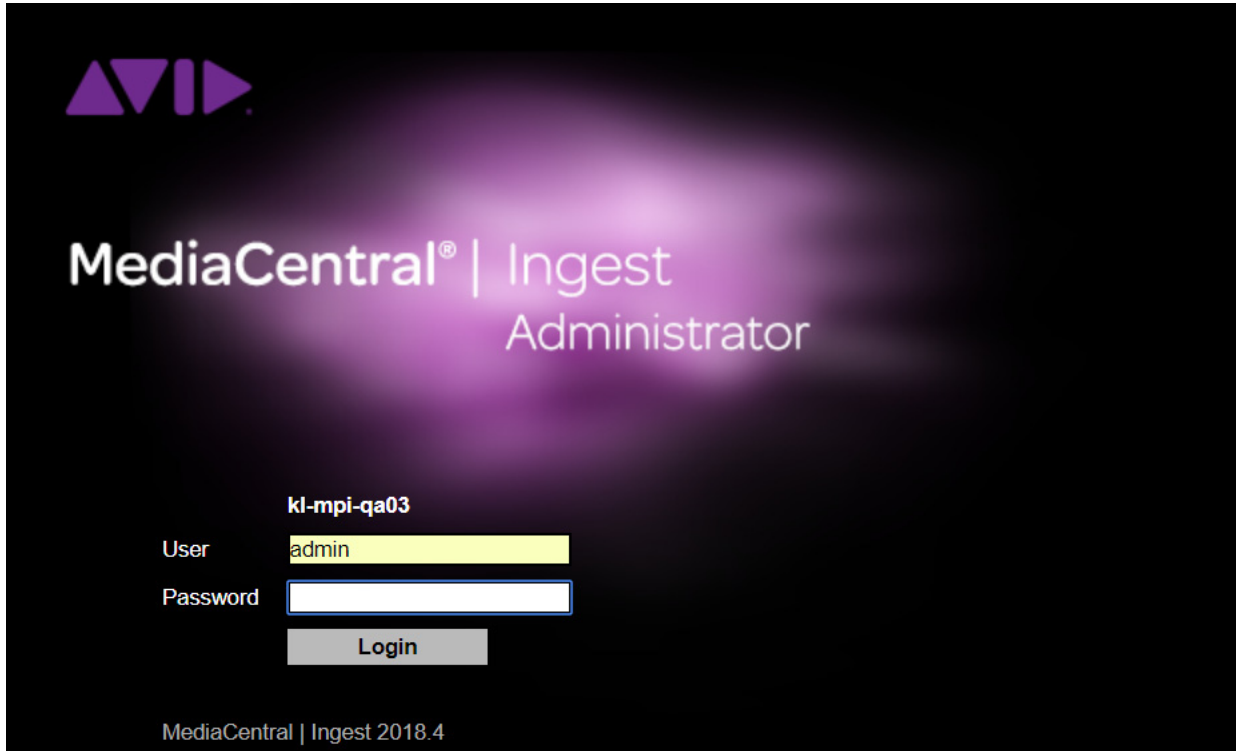
To access the MediaCentral Ingest Administration Overview:

1. Open an Internet Explorer browser and navigate to the MediaCentral Ingest web page.
`http://<engine name>`



2. Click the Administrator link.

The system opens the web login window as shown in the following illustration.



The image shows the login interface for MediaCentral | Ingest Administrator. At the top left is a logo consisting of three purple triangles. The title "MediaCentral® | Ingest Administrator" is centered in white text. Below the title, the text "kl-mpi-qa03" is displayed. The login form includes a "User" field with the value "admin", a "Password" field, and a "Login" button. At the bottom, the version "MediaCentral | Ingest 2018.4" is shown.

MediaCentral® | Ingest Administrator

kl-mpi-qa03

User admin

Password

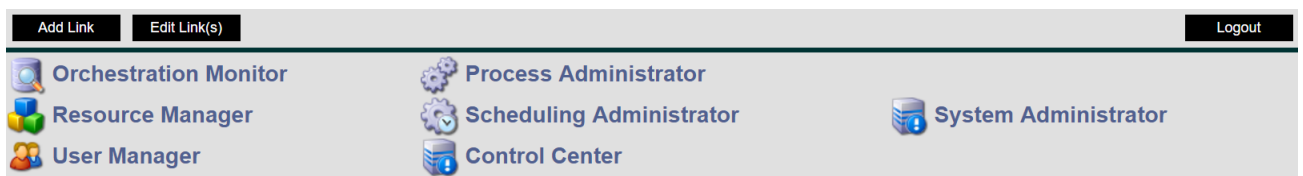
Login

MediaCentral | Ingest 2018.4



The default user name is “admin” and the default password is “nimda”.

The system opens the MediaCentral Ingest Administration Overview screen as shown in the following illustration:



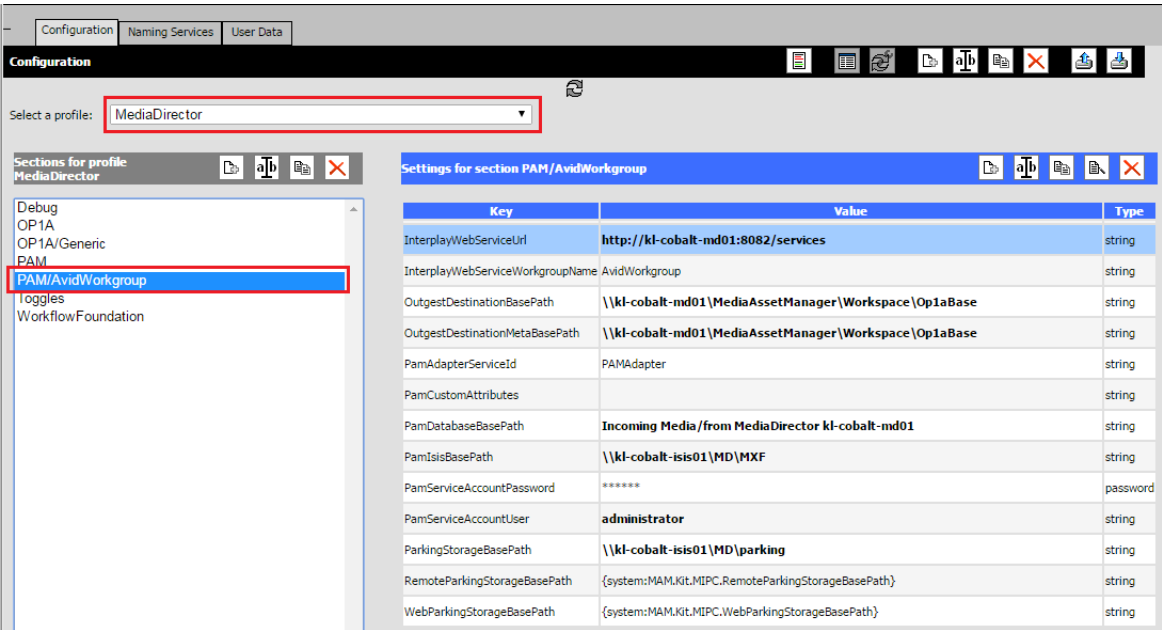
Modifying the MediaCentral | Production Management Configuration Parameters

To modify the configuration parameters:

1. Access the MediaCentral Ingest Administration Overview as described in “[Accessing the MediaCentral | Ingest Administration Overview](#)” on page 146.



2. Click the “System Administrator” link to open the Administration screen.
3. Select MediaDirector from the “Select a profile” menu and click the PAM/AvidWorkgroup section as shown in the following illustration.



4. Edit the parameters to match your MediaCentral Production Management system configuration as shown in the following table.

Parameter	Description	Example
InterplayWebServiceUrl	The URL of the Interplay Web Services installation used by your MediaCentral Ingest Engine. Will typically point to the MediaCentral Ingest engine since MediaCentral Ingest installs its own Interplay Web Services instance. Usually there is no need to change this value.	http://mun-mpifbx02:8082/services
InterplayWebServiceWorkgroupName	The Workgroup name as configured in InterplayWS. The InterplayWS workgroup name must be unique in all PAM configurations.	AvidWorkgroup
OutgestDestinationBasePath	This setting defines the base path for Outgest To Op1A operations. OP1a files will be created at this location. If empty, the Outgest To Op1A profile is required to provide an absolute path to the OP1a media location. Please note, that outgest parameters for PAM watch folders are configured in the corresponding setting of the PAMWatchService profile.	\\kl-cobalt-md01\MediaAssetManager \ Workspace\Op1aBase
OutgestDestinationMetaBasePath	This setting defines the metadata base path for Outgest To Op1A operations. Metadata side car files will be created at this location. If empty, the Outgest To Op1A profile is required to provide an absolute path to the metadata side car file location. Please note, that outgest parameters for PAM watch folders are configured in the corresponding setting of the PAMWatchService profile.	\\kl-cobalt-md01\MediaAssetManager \ Workspace\Op1aBase

Parameter	Description	Example
PamCustomAttributes	The setting defines some attributes to be retrieved by PAMAdapter from an asset in PAM, in addition to the attributes hardcoded in it. To define multiple attributes simultaneously, the single attribute must be separated by a vertical bar (). The setting defines the user attribute 'Exposure Time' and 'Focal Length', alongside the system attribute 'Video Codec' and 'Audio Codec'. PAMAdapter will retrieve these attributes in addition to the attributes hardcoded in it. The list of available PAM attributes hardcoded in PAMAdapter can be retrieved from http://--YourInterplayWS--/web/docs/attributes.	Group=USER;Name=Exposure Time Group=USER;Name=Focal Length Group=SYSTEM;Name=Video Codec Group=SYSTEM;Name=Audio Codec
PamDatabaseBasePath	An administrative base path for the Production Management database. All MediaCentral Ingest profiles will create database entries under this path helping administrators to keep the AMA metadata in one portion of the Production Management database. Note that you can use tokens and token functions when defining levels in the path.	Incoming Media/from MediaDirector mun-mpifbx02
PamIsisBasePath	An administrative base path for the ISIS production storage. All MediaCentral Ingest profiles will create proxy media under this path helping administrators to keep track of the Avid OpAtom files on the production ISIS.	\\mun-vtli2k\media_director
PamServiceAccountPassword	The password used by Interplay Web Services to access the target Production Management workgroup.	
PamServiceAccountUser	The user used by Interplay Web Services to access the target MediaCentral Production workgroup.	Administrator

Parameter	Description	Example
ParkingStorageBasePath	An administrative base path for the parking storage. All MediaCentral Ingest profiles will park source media under this path helping administrators to keep track of the AMA files on the parking storage.	\\mun-vtli2k\parked\ Avid MediaFiles\MXF
RemoteParkingStorageBasePath	An administrative base path for remote parking storage. When configured to use a remote parking base path, all MediaCentral Ingest profiles will park source media under this path. Configure the path on remote storage to match. In order to utilize the RemoteParkingStorageBasePath you must select the Upload Connection Type “Remote” in the MediaCentral Ingest Drop Utility login dialog box. For additional information, see “Copy Provider Service - WAN Support” on page 74 .	Syntax for ftp protocol: ftp://<user> <password>@<ftp_path/to/ parking/storage> Syntax for CIFS protocol: \\<cifs_path_to_parking_storage>
WebParkingStorageBasePath	Base path on the web connected parking storage. This must be a WebDAV path like webdav://user:password@MyServer/path/... In order to utilize the WebParkingStorageBasePath you must select the Upload Connection. Type “Internet” in the MediaCentral Ingest Drop Utility login dialog box. See “Configuring the Drop Utility Application” on page 41 .	

- Follow the steps in the section [“Restarting a Service” on page 165](#) to restart the PAMAdapter service.

Modifying the Op1A Output Parameters for Outgest To Op1A

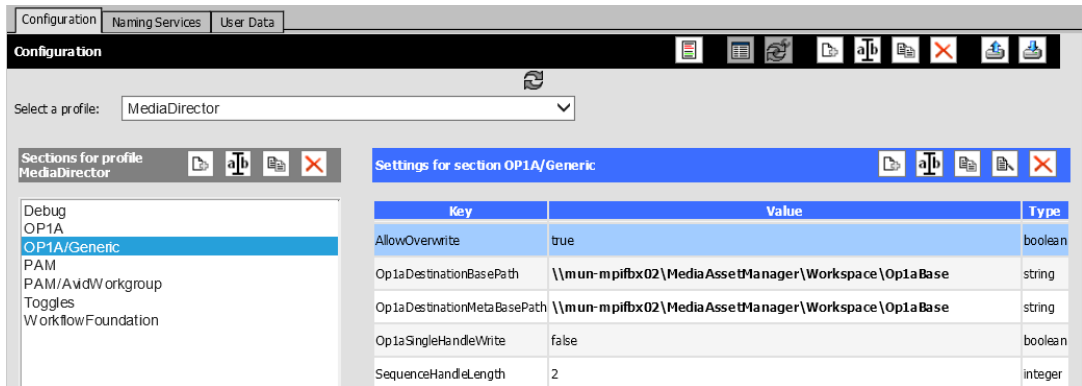
Op1A output parameters are available through the OP1A/Generic section.



You should not change these settings unless explicitly instructed by Avid Customer Support.

To modify the OP1A output parameters:

1. Select MediaDirector from the “Select a profile” menu.
2. Select OP1A/Generic from the “Sections for profile MediaDirector” area as shown in the following example:



3. Change the OP1A output parameters as shown in the following table:

Parameter	Description	Example
AllowOverwrite	When set to true, OP1a and metadata sidecar files will be overwritable. Users will be able to export to OP1a files again if a previous export exists. When set to false, OP1a and metadata sidecar files will not be overwritable. Users will not be able to export to OP1a files again if a previous export exists.	false

Parameter	Description	Example
Op1aDestinationBasePath	This setting defines the base path for OP1a operations as OP1A to OP1A or AMA to OP1A, not for OutgestTo Op1A. OP1a files will be created at this location. If empty, the OP1a profile is required to provide an absolute path to the OP1a media location.	\\MCI_Server\MediaAssetManager\Workspace\Op1aBase
Op1aDestinationMetaBasePath	This setting defines the metadata base path for OP1a operations as OP1A to OP1A or AMA to OP1A, not for OutgestTo Op1A. Metadata sidecar files will be created at this location. If empty, the OP1a profile is required to provide an absolute path to the metadata sidecar file location.	\\MCI_Server\MediaAssetManager\Workspace\Op1aBase
Op1aSingleHandleWrite	When set to true, only a single, buffered and non-aligned handle is used for writing MXF OP1a files. This may lead to slower throughput when creating MXF OP1a file, but can improve robustness when creating MXF OP1a files on some specific file systems or on specifically configured network file systems. When set to false, the Media Rewrapping Worker will try to determine the native sector size of the target storage and - if successful - will use an additional aligned, non-buffered handle to achieve maximum throughput on write.	false
SequenceHandleLength	This is the number of seconds which will be used for adding a handle for cuts inside a sequence.	

Modifying the Workflow Foundation Parameters

Additional MediaCentral Ingest configuration settings are available through the Workflow Foundation section.



You should not change these settings unless explicitly instructed by Avid Customer Support.

To modify the Workflow Foundation settings:

1. Select MediaDirector from the “Select a profile” menu.
2. Select Workflow Foundation from the “Sections for profile MediaDirector” area as shown in the following example.

The screenshot shows the MediaCentral Configuration window. The 'Configuration' tab is active, and the 'MediaDirector' profile is selected. Under 'Sections for profile MediaDirector', 'WorkflowFoundation' is selected. The 'Settings for section WorkflowFoundation' table is displayed below.

Key	Value	Type
AaffTempDirectory	\\kl-mpi-qa03\MediaAssetManager\Workspace\MediaDirector\AaffTempDirectory	string
CreateMixdownForTranscodedClips	false	boolean
CreateSequenceForRegisteredClips	false	boolean
CreateSequenceForTranscodedClips	false	boolean
CreateSequenceUseSourceTCPProfileTags		list
CustomScriptDirectory	\\kl-mpi-qa03\MediaAssetManager\Workspace\MediaDirector\CustomScriptDirectory	string
DefaultConsolidateTargetAudioResolution	PCM	list
DefaultConsolidateTargetVideoResolution	XDCAM-HD 50	list
ImportTempDirectory	\\kl-mpi-qa03\MediaAssetManager\Workspace\MediaDirector\ImportTempDirectory	string
MaxConcurrentMrwTranscodeJobs	25	integer
RunVirusScan	false	boolean

3. Change the Workflow Foundation settings as shown in the following table.

Parameter	Description	Example
AafTempDirectory	The directory where temporary AAF files are stored on MediaCentral Ingest Engine	\\my_server\MediaAssetManager\Workspace\MediaDirector\AafTempDirectory
CreateMixdownForTranscodedClips	This option creates a single master clip from the media created on ISIS storage by a profile that includes a Transcode step. The system creates the masterclip from either the transcoded media or the transparent pass through media (same as source). Limitation: All clips in the masterclip need to have the same frame rate. Note that you can override this setting using the Mixdown profile value for ingest profiles that include a transcode step. See the Post Processing options in “Editing the Rules Tab for a Profile” on page 118.	

Parameter	Description	Example
CreateSequenceForRegisteredClips	MediaCentral Ingest can automatically generate a sequence from all linked/AMA clips that are contained in a volume. If this parameter is set to true, the sequence will be generated from the master clips on the parked storage location. Limitation: All clips in the volume need to have the same frame rate. Note that you can override this setting using the Create Sequence profile value for ingest profiles that include a register step. See the Post Processing options in “Editing the Rules Tab for a Profile” on page 118.	
CreateSequenceForTranscodedClips	This option creates a sequence from the media created on ISIS storage by a profile that includes a Transcode step. The sequence will be generated from either the transcoded media or the transparent pass through media (same as source). Limitation: All clips in the sequence need to have the same frame rate. Note that you can override this setting using the Create Sequence profile value for ingest profiles that include a transcode step. See the Post Processing options in “Editing the Rules Tab for a Profile” on page 118.	
CustomScriptDirectory	This folder contains the token.js file where the token functions get defined.	

Parameter	Description	Example
CreateSequenceUseSourceTCProfileTags	Profile tags used to select the AMA jobs which will use the start timecode of the first clip in the sequence when creating the AMA linked and native sequence.	
DefaultConsolidateTargetAudioResolution	The audio resolution that should be used when falling back to transcoding Sample Provider media on consolidation requests.	Select a value from the popup list. The system default is PCM
DefaultConsolidateTargetVideoResolution	The video resolution that should be used when falling back to transcoding Sample Provider media on consolidation requests.	Select a value from the popup list. The system default is XDCAM HD 50. For additional information, see “MediaCentral Ingest Process Detail Descriptions” on page 28.
ImportTempDirectory	Files that get dropped into a WatchService will be moved to a unique subfolder of the ImportTempDirectory before getting processed. MediaCentral Ingest can only work on volumes and the unique folder will be used as volume root.	\\my_server\MediaAssetManager\Workspace\MediaDirector\ImportTempDirectory
MaxConcurrentMrwTranscodeJobs	The maximum number of Transcode processes that will be allowed to run in parallel on the MediaCentral Ingest Engine.	25

Parameter	Description	Example
RunVirusScan	This option allows you to automatically run the virus scanning application of your choice as a workflow step in an ingest job. This feature links MediaCentral Ingest to your antivirus software via a small script; the antivirus solution can the be used to scan the media on the parking/cache storage and authorize the ingest process to continue only if no issue has been detected. For additional information, see the “Finalize the Installation” section in the <i>MediaCentral Ingest Engine Installation Guide</i> .”	

4. Restart the PAMAdapter service.

Modifying the Watch Folder Parameters

For additional information, see [“Using a Watch Folder” on page 67](#).

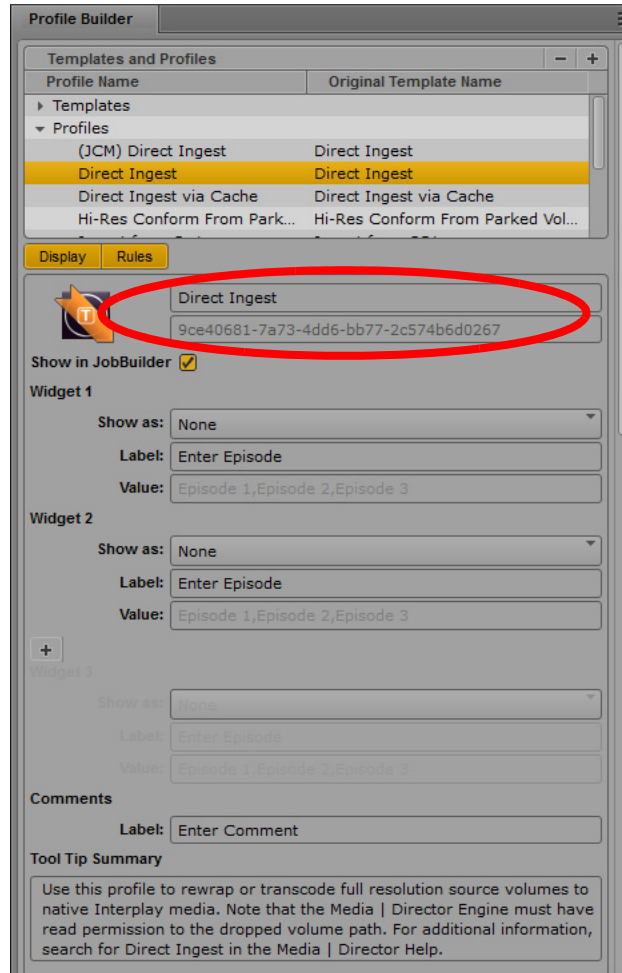
Changing the Profile Associated with the Watch Folder

MediaCentral Ingest supports up to 10 Watch folder profiles per installation. Starting with Media Director 2.x, additional watch services can be installed if needed. The Watch folder is associated with a profile. This section describes how to change the profile associated with the Watch folder. The following profiles are supported for watch folders:

- Park and Register
- Park, Register, and Transcode
- Direct Ingest
- Direct Ingest via Cache
- Ingest from OP1A

The example in this section shows how to use a watch folder with a Direct Ingest profile.

- Each profile has an associated GUID (globally unique identifier). The following illustration shows the GUID for an example Direct Ingest profile.



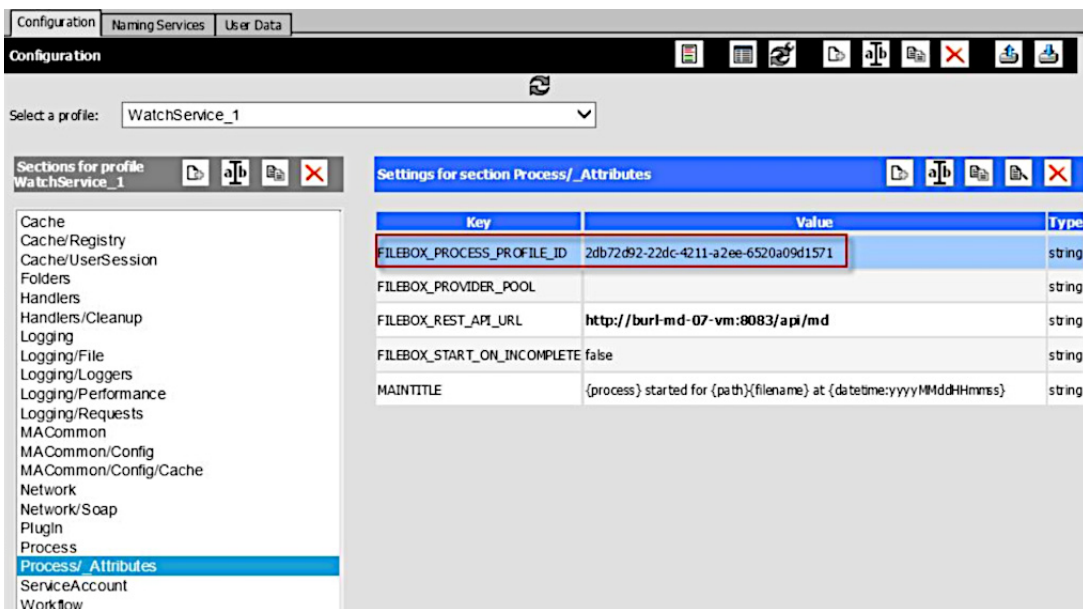
- You use the Workflow Foundation interface to associate the GUID of a profile with the Watch folder. The MediaCentral Ingest installer sets up the default association and you can change it when necessary.

To change the profile associated with the Watch folder:

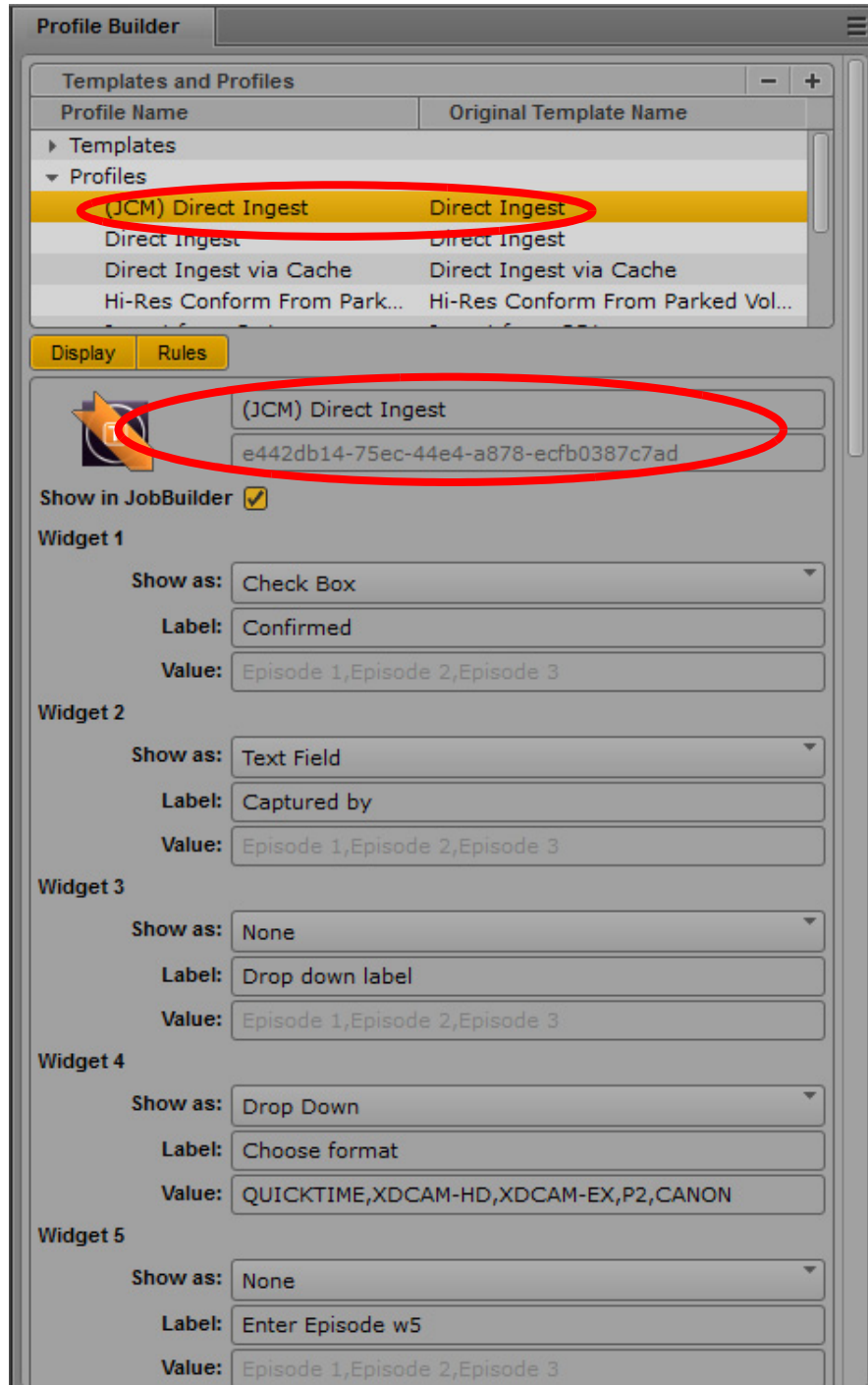
1. Open the System Administrator web interface as described in Modifying the MediaCentral | Production Management Configuration Parameters.
2. Select WatchService_1 from the “Select a profile” menu.

3. Select Process/_Attributes from the “Sections for profile WatchService_1” area.

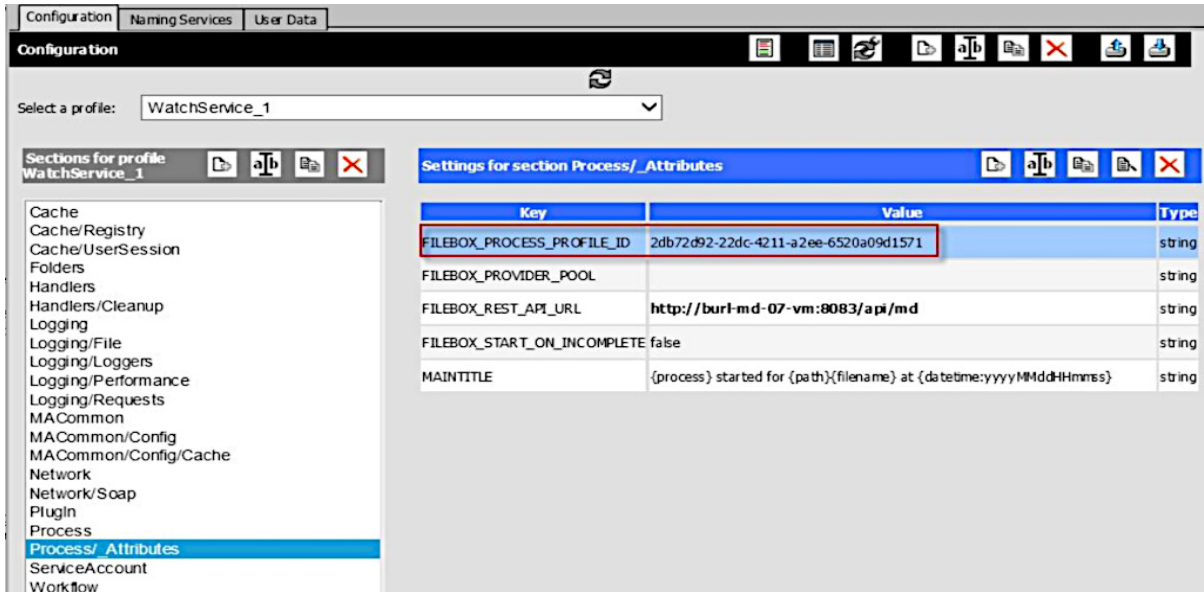
The system displays the GUID associated with the Watch folder as shown in the following illustration



4. Open the Drop Utility application and select the Profile Builder.
5. Select the profile that you want to associate with the Watch folder in the Profile builder. In this example the profile is called “(JCM) Direct Ingest.”



6. Open the Display tab in the Profile Builder and locate the GUID value.
7. Select and copy the entire GUID text string.
8. Return to the Workflow Foundation interface and paste the value into the “FILEBOX_PROCESS_PROFILE_ID” area. The following illustration shows the new value pasted in.



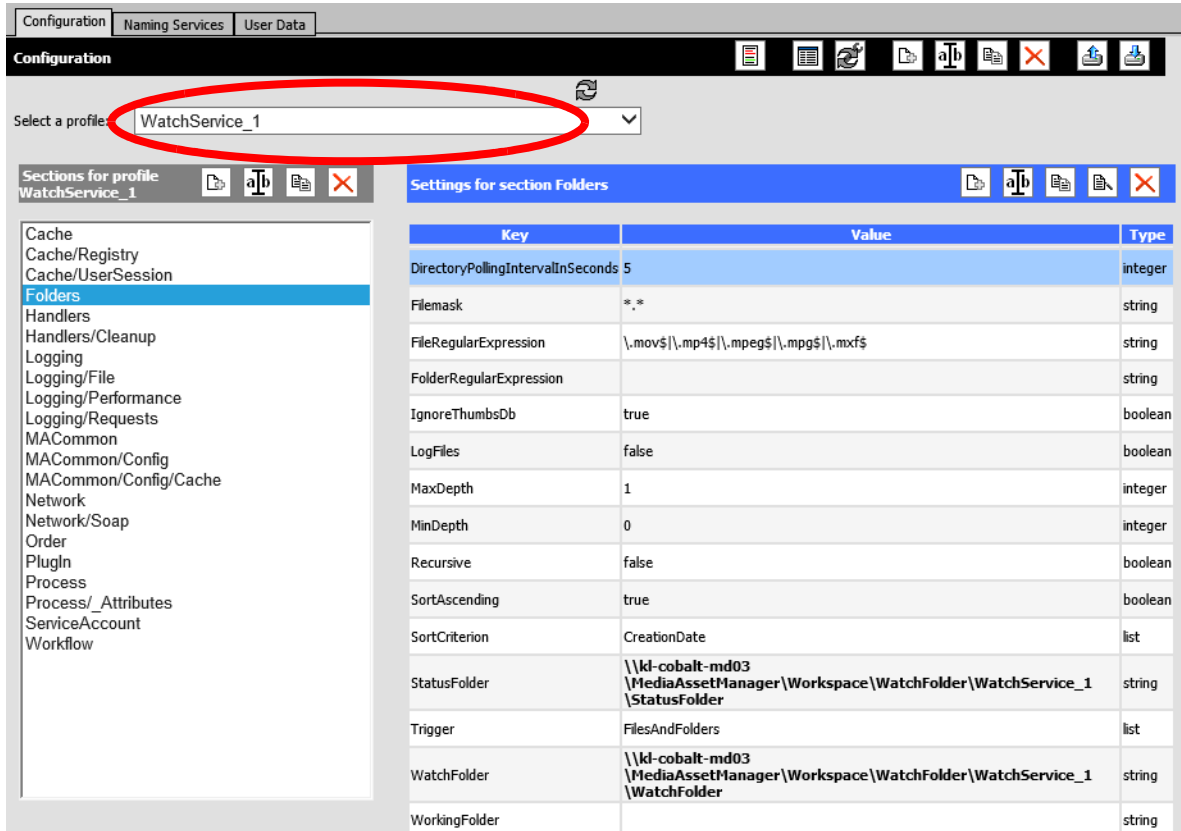
9. Restart the WatchService_1 service as described in [“Restarting a Service” on page 165](#).

The new profile is now associated with the Watch folder.

Changing Additional Parameters for the Watch Folder

To modify the Watch Folder settings:

1. Select WatchService_1 from the “Select a profile” menu.



The screenshot shows the Configuration window with the 'Configuration' tab selected. The 'Select a profile' dropdown menu is highlighted with a red circle, showing 'WatchService_1' as the selected profile. Below the dropdown, the 'Sections for profile WatchService_1' list includes 'Cache', 'Cache/Registry', 'Cache/UserSession', 'Folders' (highlighted), 'Handlers', 'Handlers/Cleanup', 'Logging', 'Logging/File', 'Logging/Performance', 'Logging/Requests', 'MACommon', 'MACommon/Config', 'MACommon/Config/Cache', 'Network', 'Network/Soap', 'Order', 'Plugin', 'Process', 'Process/_Attributes', 'ServiceAccount', and 'Workflow'.

The 'Settings for section Folders' table is displayed on the right side of the window. The table has three columns: Key, Value, and Type.

Key	Value	Type
DirectoryPollingIntervalInSeconds	5	integer
Filemask	*.*	string
FileRegularExpression	\\.mov\$ \\.mp4\$ \\.mpeg\$ \\.mpg\$ \\.mxf\$	string
FolderRegularExpression		string
IgnoreThumbsDb	true	boolean
LogFiles	false	boolean
MaxDepth	1	integer
MinDepth	0	integer
Recursive	false	boolean
SortAscending	true	boolean
SortCriterion	CreationDate	list
StatusFolder	\\kl-cobalt-md03\\MediaAssetManager\\Workspace\\WatchFolder\\WatchService_1\\StatusFolder	string
Trigger	FilesAndFolders	list
WatchFolder	\\kl-cobalt-md03\\MediaAssetManager\\Workspace\\WatchFolder\\WatchService_1\\WatchFolder	string
WorkingFolder		string

2. Change the settings as shown in the following table and then restart the WatchService_1 service as described in [“Restarting a Service” on page 165](#).

Section	Parameter	Description
Folders	DirectoryPollingIntervalInSeconds	The polling interval to check for new files or folders in the watch folder. Default: 5 seconds
	Filemask	High level matching for files. Default: *.*

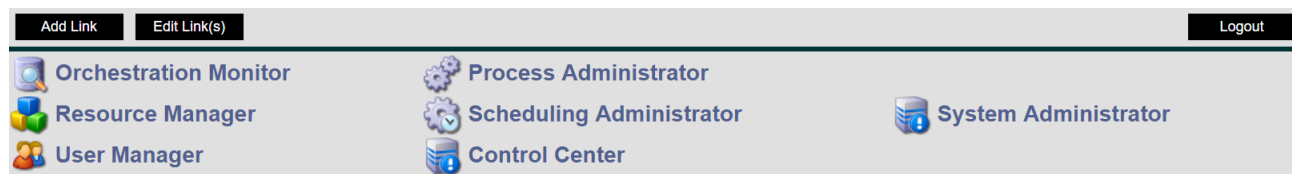
Section	Parameter	Description
	FileRegularExpression	A regular expression that defines which files to track. Use a pipe-separated list of file extensions such as: \mov\$\mp4\$\mpeg\$\mpg\$\mxf\$ You need to escape the individual extensions with backslashes.
	FolderRegularExpression	A regular expression that defines which folders to track. By default: empty
	MaxDepth	Don't change the defaults.
	Trigger	Use this setting to define if you want to monitor files, or folders only, or both. Possible settings are Files, Folders or FilesAndFolders. By default the WatchService monitors files and folders.
	WatchFolder	This is the folder that is being monitored. Please note that this folder needs to be a UNC path and accessible by the user that runs the WatchService.
Handlers	ConcurrentHandlers	This setting configures the amount of jobs that will be started at the same time.
Handlers / Cleanup	FailureFolder	If configured, media from failed operations will be moved into this folder. This folder is generated during the installation process, but can be changed to any other UNC location that is accessible by the WatchService.
	OnFailure	Configures what to do on failed operations. Possible settings are Move, Delete, NoAction.
	SuccessFolder	If configured, media that was successfully processed will be moved into this folder. This folder is generated during the installation process, but can be changed to any other UNC location that is accessible by the WatchService.
	OnSuccess	Configures what to do on failed operations. Possible settings are Move, Delete, NoAction.

Section	Parameter	Description
Process /_Attributes:	FILEBOX_PROCESS_PROFILE_ID	This setting specifies the profile that is used when submitting a job on a new file or folder. The ID listed here is the GUID of the profile. The GUID can be obtained from the Profile Builder UI of the MediaCentral Ingest Drop Utility. You can change the profile assigned to the Watch folder by replacing the GUID with a GUID from a different Direct Ingest profile. See Changing the Profile Associated with the Watch Folder .
Process /_Attributes:	FILEBOX_START_ON_INCOMPLETE	This setting specifies when a profile job should be started. By default, the job is started when the file or volume is written completely. For single files, you can choose to start processing of growing files by setting this value to true. This is only supported for Ingest From Op1A.

Restarting a Service

To restart a service:

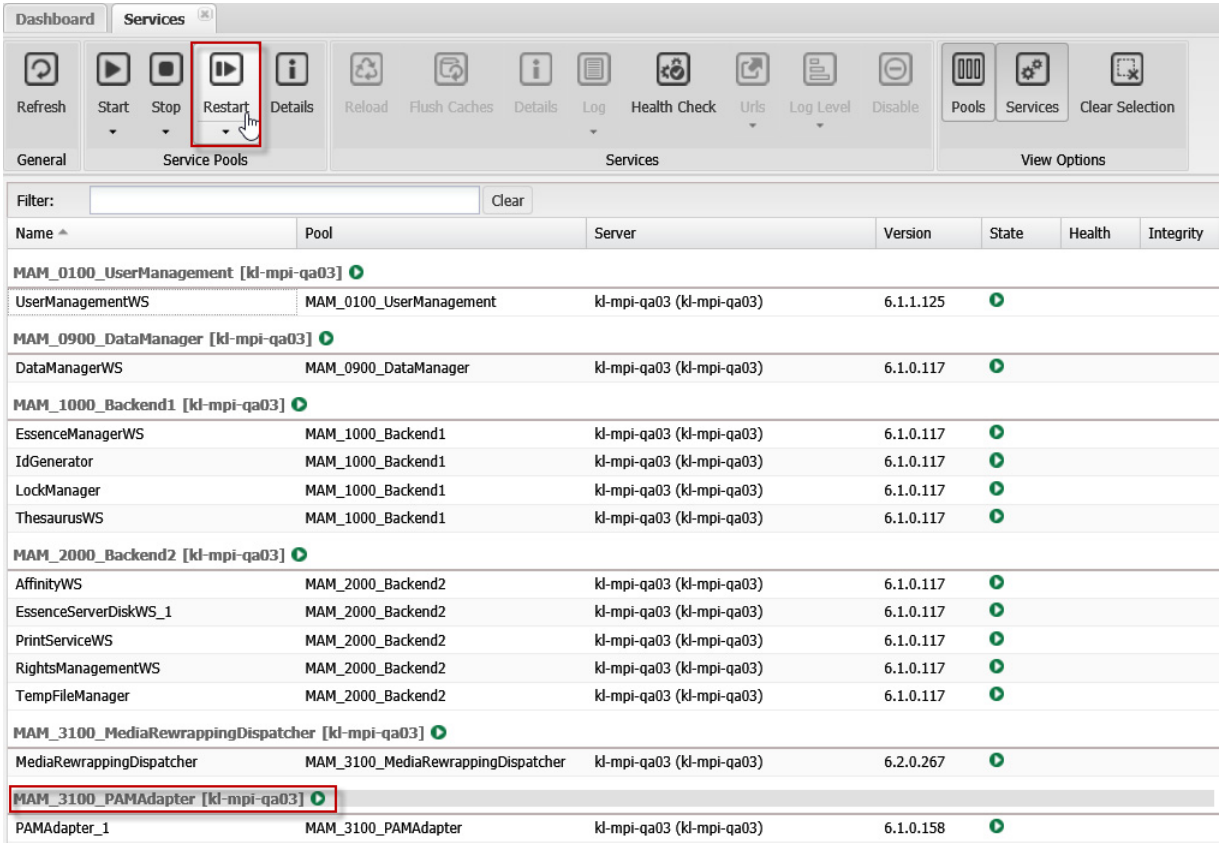
1. Access the MediaCentral Ingest Administration Overview as described in [“Accessing the MediaCentral | Ingest Administration Overview”](#) on page 146.



2. Open the “Control Center” from the overview screen. Log in with the credentials of the service user that you specified during the installation.

The screenshot shows the MediaCentral dashboard interface. On the left, the 'Views' sidebar lists various sections: Dashboard, Setup (Package Management, Servers, Service Distribution), Configuration (System Settings), Monitor (Jobs, Packages, Services), and System Links (Administrator, Desktop). The 'Services' option under the Monitor section is highlighted with a red box. The main dashboard area is titled 'Dashboard' and shows details for 'kl-mpi-qa03', including its release (2017.2) and ID (001D971B-B441-471F-A740-956B1AE26521). Below this, there are sections for 'Installed Products' (showing MediaCentral | Ingest) and 'Servers' (showing kl-mpi-qa03). On the right side, there are several functional blocks: 'Setup' (Package Management, Servers, Service Distribution), 'Configuration' (System Settings), 'Monitor' (Jobs, Packages, Services), and 'System Links' (Administrator, Desktop). The 'Services' icon in the Monitor block is highlighted with a red box.

3. Open the Services view and select the “Service Pool” of the Service you would like to restart. For example, select “MAM_3100_PAMAdapter” for the “PAMAdapter” service.
4. Click “Restart” in the “Service Pools” section of the toolbar.



Dashboard Services

Refresh Start Stop **Restart** Details Reload Flush Caches Details Log Health Check Urls Log Level Disable Pools Services Clear Selection

General Service Pools Services View Options

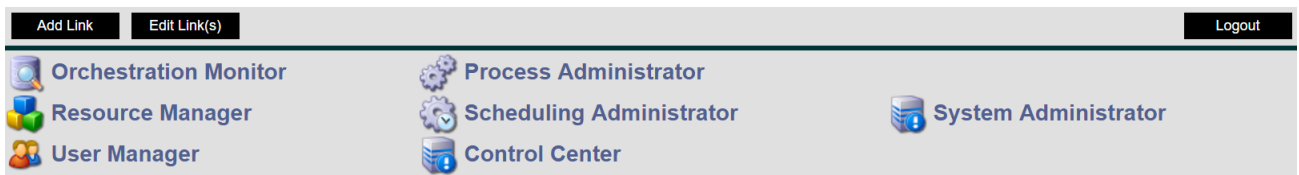
Filter: Clear

Name	Pool	Server	Version	State	Health	Integrity
MAM_0100_UserManagement [kl-mpi-qa03]						
UserManagementWS	MAM_0100_UserManagement	kl-mpi-qa03 (kl-mpi-qa03)	6.1.1.125			
MAM_0900_DataManager [kl-mpi-qa03]						
DataManagerWS	MAM_0900_DataManager	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
MAM_1000_Backend1 [kl-mpi-qa03]						
EssenceManagerWS	MAM_1000_Backend1	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
IdGenerator	MAM_1000_Backend1	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
LockManager	MAM_1000_Backend1	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
ThesaurusWS	MAM_1000_Backend1	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
MAM_2000_Backend2 [kl-mpi-qa03]						
AffinityWS	MAM_2000_Backend2	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
EssenceServerDiskWS_1	MAM_2000_Backend2	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
PrintServiceWS	MAM_2000_Backend2	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
RightsManagementWS	MAM_2000_Backend2	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
TempFileManager	MAM_2000_Backend2	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.117			
MAM_3100_MediaRewrappingDispatcher [kl-mpi-qa03]						
MediaRewrappingDispatcher	MAM_3100_MediaRewrappingDispatcher	kl-mpi-qa03 (kl-mpi-qa03)	6.2.0.267			
MAM_3100_PAMAdapter [kl-mpi-qa03]						
PAMAdapter_1	MAM_3100_PAMAdapter	kl-mpi-qa03 (kl-mpi-qa03)	6.1.0.158			

Enabling and Disabling Rewrapping Workers

To enable and disable rewrapping workers:

1. Access the MediaCentral Ingest Administration Overview as described in [“Accessing the MediaCentral | Ingest Administration Overview”](#) on page 146.



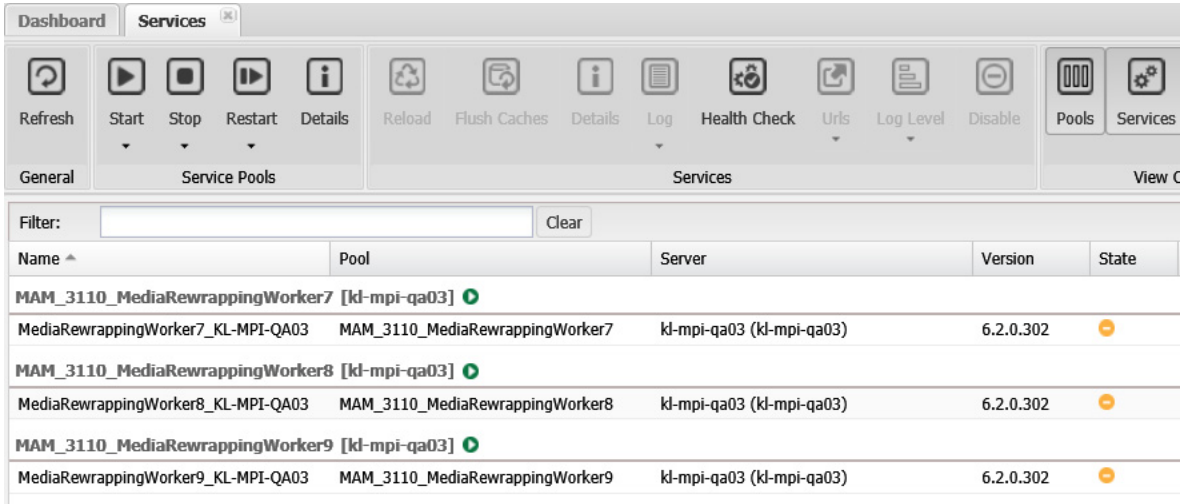
Add Link Edit Link(s) Logout

Orchestration Monitor Process Administrator
Resource Manager Scheduling Administrator
User Manager Control Center System Administrator

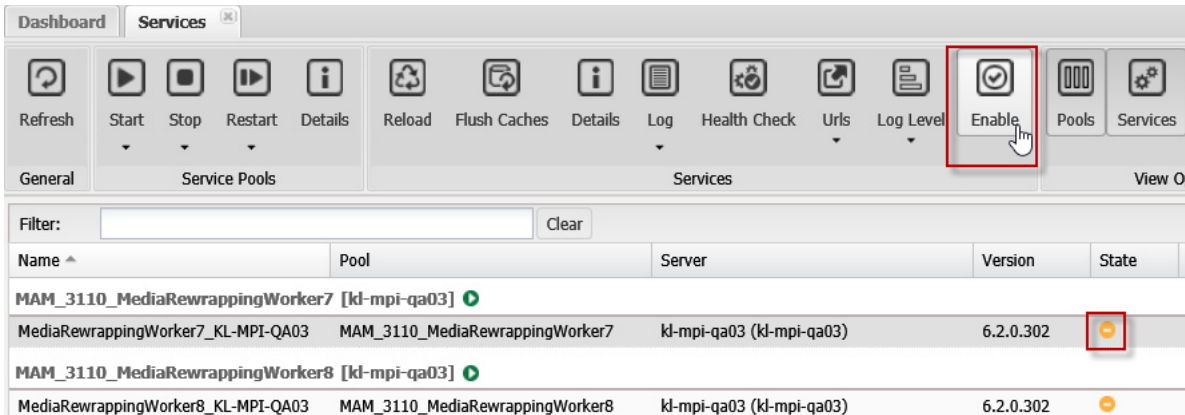
2. Open the “Control Center” from the overview screen. Log in with the credentials of the service user that you specified during the installation.

The screenshot displays the MediaCentral web interface. On the left, the 'Views' sidebar shows a tree structure with 'Services' selected and highlighted with a red box. The main content area is the 'Dashboard' for system 'kl-mpi-qa03'. It includes a top toolbar with buttons like 'Refresh', 'Details', 'Licenses', 'Credits', 'Control Center Log', 'Package FTP Upload', 'Downloads', and 'Update Licenses'. Below this, system details show 'Release: 2017.2' and 'Id: 001D971B-B441-471F-A740-956B1AE26521'. Two tables are present: 'Installed Products' listing 'MediaCentral | Ingest' with version '2018.4' and a green checkmark, and 'Servers' listing 'kl-mpi-qa03' with a green status icon. On the right, a vertical sidebar contains sections: 'Setup' (Package Management, Servers, Service Distribution), 'Configuration' (System Settings), 'Monitor' (Jobs, Packages, Services), and 'System Links' (Administrator, Desktop). The 'Services' icon in the Monitor section is highlighted with a red box.

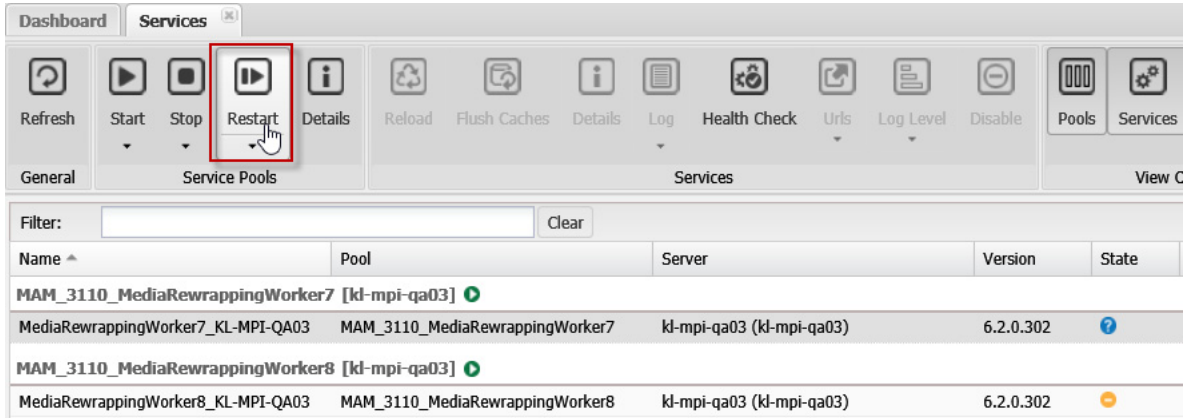
3. Open the Services view. There you will see a toolbar with a section for the Service Pools and a section for the Services. Underneath the toolbar, you will see a list containing the various services present on the system.



4. Locate and select the worker Service you would like to enable.
5. Click “Enable” in the Services section of the toolbar.



6. Select the Service Pool that the worker service belongs to.
7. Click “Restart” in the “Service Pool” section of the toolbar to finalize the process.



8. Repeat steps 4-7 for all worker services that you want to enable.

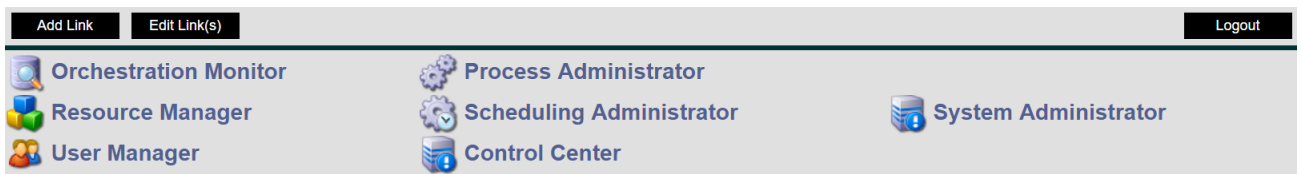
Changing System Settings



Please carefully read the section “Managing Settings” in the *Avid MediaCentral | Ingest System Administrator User’s Guide* before modifying any settings so that you fully understand the scope of the changes that you are making.

To change system settings:

1. Access the MediaCentral Ingest Administration Overview as described in “[Accessing the MediaCentral | Ingest Administration Overview](#)” on page 146.



2. Open the “Control Center” from the overview screen. Log in with the credentials of the service user that you specified during the installation.

The screenshot displays the MediaCentral dashboard for a system named 'kl-mpi-qa03'. The interface includes a left-hand navigation pane with sections for Views, Setup, Configuration, Monitor, and System Links. The 'Configuration' section is expanded, and 'System Settings' is highlighted with a red box. The main dashboard area shows system information (Release: 2017.2, Id: 001D971B-B441-471F-A740-956B1AE26521) and several functional blocks: Installed Products (MediaCentral | Ingest), Servers (kl-mpi-qa03), Setup (Package Management, Servers, Service Distribution), Configuration (System Settings), Monitor (Jobs, Packages, Services), and System Links (Administrator, Desktop).

Views

- Dashboard
- Setup
 - Package Management
 - Servers
 - Service Distribution
- Configuration
 - System Settings**
- Monitor
 - Jobs
 - Packages
 - Services
- System Links
 - Administrator
 - Desktop

Dashboard

Refresh Details Licenses Credits Control Center Log Package FTP Upload Downloads Update Licenses

General Info Misc Actions

kl-mpi-qa03

Release: 2017.2
Id: 001D971B-B441-471F-A740-956B1AE26521

Installed Products

Product	Version	Status
MediaCentral Ingest	2018.4	✓

Servers

Server	Status
kl-mpi-qa03	✓

Setup

- Package Management
- Servers
- Service Distribution

Configuration

- System Settings**

Monitor

- Jobs
- Packages
- Services

System Links

- Administrator
- Desktop

3. Open the “System Settings” to see the various settings that configure the system.

For most scenarios, the category “Important” will contain every setting you will need to modify.

Dashboard System Settings						
Refresh Delete General Actions						
Category: Important Filter: Clear						
Name	Display name	Value	Expanded Value	Type	Range	Description
Package:						
System.Bus.HostName	Bus host name			string		
System.Version	MAM Engine Version	6.1	6.1	string		
System.ProductName	Product Name	MediaCentral® Asset Management	MediaCentral® Asset Management	string		
System.ProductVersion	Product Version	2017.2	2017.2	string		
System.Culture	System Culture	en	en	string		
System.Description	System Description			string		
System.Name	System Name	kl-mpi-qa03	kl-mpi-qa03	string		
Package: Mam.Core.Base						
Mam.Core.PrintService.OutputPath	Output directory for print service (UNC).	{system:Mam.Core.TempDirectory}\PrintService\Output	\\kl-mpi-qa03\MediaAssetManager\Workspace\PrintService\Output	directory		PrintService output directory
Package: Mam.Core.Desktop						
Mam.Core.Desktop.ExportFolder	Desktop export folder	{system:Mam.Core.TempDirectory}\Desktop\Export	\\kl-mpi-qa03\MediaAssetManager\Workspace\Desktop\Export	directory		Central UNC folder storing exported packages.
Package: Mam.Core.EssenceManagement						
Mam.Core.Icps.User	ICPS user	Administrator	Administrator	string		ICPS user name.
Mam.Core.Icps.Password	ICPS password	*****	*****	password		ICPS password.
Package: Mam.Core.Infrastructure						
Mam.Core.Administrator.User	Administrator account user	admin	admin	string		Administrator account name.
Mam.Core.Log.Level	Log Level	Info	Info	string	Off,...	Log level

Note that the most relevant settings for MediaCentral Ingest can be found under the “Mam.Kit.MediaIngestPersonalityConfiguration” grouping. In order to quickly find settings, you can use a filter like “MIPC”.

Dashboard System Settings						
Refresh Delete General Actions						
Category: Important Filter: MIPC Clear						
Name	Display name	Value	Expanded Value	Type	Range	Description
Package: Mam.Kit.MediaIngestPersonalityConfiguration						
MAM.KIT.MIPC.DataRootDir	Alias for System Workspace Directory	{system:Mam.Core.TempDirectory}	\\kl-mpi-qa03\MediaAssetManager\Workspace	directory		Alias for System Workspace Directory
MAM.KIT.MIPC.InterplayWSHost	InterplayWS Host	{system:MAM.KIT.MIPC.ServerName}	kl-mpi-qa03	string		InterplayWS Host
MAM.KIT.MIPC.InterplayWSPort	InterplayWS Port	8082	8082	integer		InterplayWS Port
MAM.KIT.MIPC.DataFolder	MD Data Folder	{system:Mam.Core.TempDirectory}\MediaDirector	\\kl-mpi-qa03\MediaAssetManager\Workspace\MediaDirector	directory		Central UNC folder for data files which are created during the MD processing
MAM.KIT.MIPC.ServerName	MD Server Name	kl-mpi-qa03	kl-mpi-qa03	string		MD Server Name
MAM.KIT.MIPC.PamIsisBasePath	PAM ISIS Base Path	\\kl-nexis01\kl-cobalt-prod\Avid MediaFiles\MOXF	\\kl-nexis01\kl-cobalt-prod\Avid MediaFiles\MOXF	string		PAM ISIS Base Path
MAM.KIT.MIPC.PamServiceAccountPassword	PAM Service Account Password	*****	*****	passw...		PAM Service Account Password
MAM.KIT.MIPC.PamServiceAccountUser	PAM Service Account User	Administrator	Administrator	string		PAM Service Account User
MAM.KIT.MIPC.ParkingStorageBasePath	Parking Storage Base Path	\\kl-nexis01\kl-cobalt-park\AMA_QA03	\\kl-nexis01\kl-cobalt-park\AMA_QA03	string		Parking Storage Base Path
MAM.KIT.MIPC.RemoteParkingStorageBasePath	Remote Parking Storage Base Path			string		Remote Parking Storage Base Path
MAM.KIT.MIPC.WebParkingStorageBasePath	Web Parking Storage Base Path			string		Web Parking Storage Base Path

The settings can have directly set values, or values that reference other settings as follows.

- Directly Set Values

The setting ‘MAM.Kit.MIPC.PamServiceAccountUser’ is an example that has directly set value of ‘administrator’, therefore the Value and Expanded Value are the same.

- Redirected Values

The setting 'MAM.Kit.MIPC.InterplayWSHost' is an example that points to another value, '{system:MAM.Kit.MIPC.ServerName}'. Here the setting 'MAM.Kit.MIPC.ServerName' has the Value of 'kl-cobalt-md01', therefore 'MAM.Kit.MIPC.InterplayWSHost' has the Expanded Value of 'kl-cobalt-md01' as well. Modifying the Value of 'MAM.Kit.MIPC.ServerName' will also adjust the Expanded Value of 'MAM.Kit.MIPC.InterplayWSHost'. The setting 'MAM.Kit.MIPC.DataFolder' is an example where the Expanded Value is a combination of the Value of another setting and the addition of '\\MediaDirector'.

- Modifying Values

When modifying Values, keeping the above in mind is important for maintaining consistent system settings. Sometimes it makes sense to overwrite redirections and set a Value directly, but often modifying the Value of the referenced setting is the right step.

In order to change a value, double click the Value field and make your modifications. If you are changing a value with redirected values, be sure to not keep the enclosing curly braces intact.

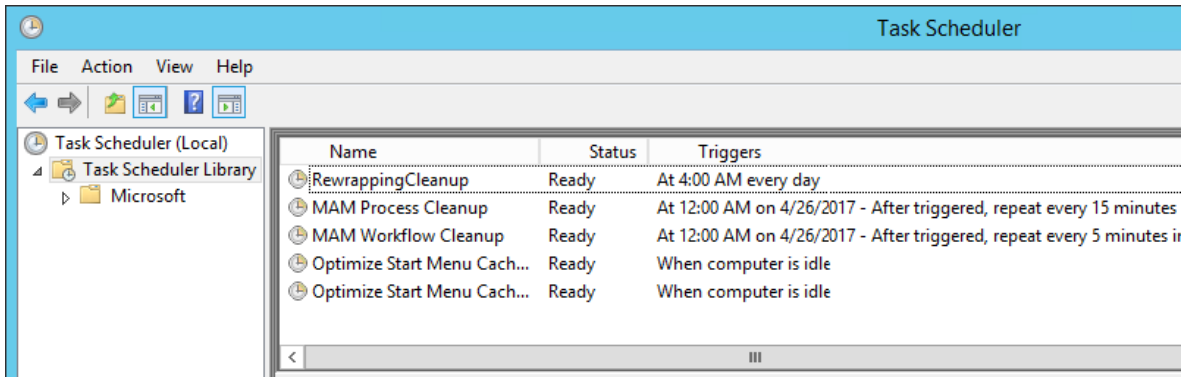
6 MediaCentral | Ingest Cleanup

This chapter provides information on how to adjust database cleanup on a MediaCentral Ingest server.

Introduction

MediaCentral Ingest stores process data in a Microsoft SQL Server Express Edition database. Since the size of a single database is limited to 10 GB, a periodic cleanup of the database is required. Avid provides a default cleanup configuration, which is designed for a workload of about 10,000 import processes per day.

MediaCentral Ingest cleanup tasks are scheduled in the Windows Task Scheduler.



MediaCentral Ingest defines the following tasks in the Task Scheduler Library section:

- RewrappingCleanup
- MAM Process Cleanup
- MAM Workflow Cleanup

For each task, you may adjust schedule and parameters such as retention of the objects, as described in the following sections.

Process Cleanup

Default schedule: every 15 minutes

For information on how to change the schedule, see [“Changing the Schedule of a Task” on page 180](#).

For information on navigating to the System Administrator, see the section “Starting System Administrator” in the See *Avid MediaCentral | Ingest System Administrator User’s Guide*.

Using the default configuration, all finished process objects older than 1 day are cleaned from the database. Each cleanup run will delete up to 200 processes.

In total, up to 19,600 process objects are deleted per day.



An Ingest started by a watch folder creates two process objects in the database.

To modify the process cleanup settings:

- 1. Start the MediaCentral Ingest Workflow Foundation System Administrator.
- 2. Select the profile StateMachineWS and then select the section Cleanup.

Admin LinksControl CenterSystem Administrator

kl-cobalt-md01:9900/ConfigurationServiceWSAdmin/ConfigurationMain.htm?acc

ConfigurationNaming ServicesUser Data

Configuration

Select a profile: StateMachineWS

Sections for profile StateMachineWS

CacheCache/RegistryCache/UserSessionCleanUpCleanUp/RulesCleanUp/Rules/DefaultCleanupCleanUp/Rules/Rule1

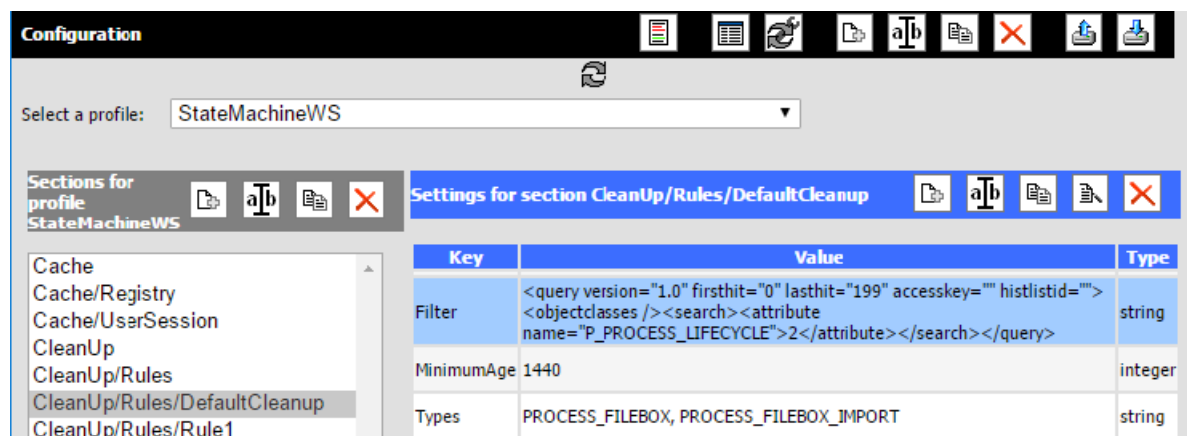
Settings for section CleanUp

Key	Value	Type
BulkSize	200	integer
EnableCleanup	true	boolean
Protected		string

3. Modify the following key as needed:

Parameter	Description	Default
BulkSize	Defines how many process objects can be cleaned up in a single run. The maximum value is 10,000. The value you set for BulkSize and the frequency of cleanup task execution scheduled in Windows Task Scheduler must be calculated carefully in order to cleanup a sufficient number of process objects.	200

4. Select the section Cleanup/Rules/DefaultCleanup.



5. Modify the following keys as needed:

Parameter	Description	Default
Filter	Attribute filter given as XML. The filter defines which processes are cleaned up. It represents a query expression and uses the XML Query Format of DataManager.	<query version="1.0" firsthit="0" lasthit="199" accesskey="" histlistid=""><objectclasses/><search><attribute name="P_PROCESS_LIFECYCLE">2</attribute></search></query>

Parameter	Description	Default
MinimumAge	Defines the time in minutes that elapse before a process can be cleaned up after it has terminated. If the value of the key is set to 0, the process can be cleaned up immediately after it has terminated. The initial value of 1440 minutes represents one day.	1440
Types	The names of the process types to which the rule applies, given as a comma-separated list. The list must contain at least one process.	PROCESS_FILEBOX, PROCESS_FILEBOX_IMPORT

Workflow Cleanup

Default schedule: every 5 minutes

For information on how to change the schedule, see [“Changing the Schedule of a Task” on page 180](#).

For information on navigating to the System Administrator, see the section “Starting System Administrator” in the *See Avid MediaCentral | Ingest System Administrator User’s Guide*.

Using the default configuration, workflows older than 1 day are cleaned from the database. Each cleanup run will delete up to 200 workflows. Only finished workflows that show no warnings and errors are deleted.

In total, up to 57,600 workflows are deleted per day.

To modify the process cleanup settings:

1. In MediaCentral Ingest Workflow Foundation System Administrator, select the profile WorkflowEngine and then select the section Cleanup.

Select a profile:

Sections for profile WorkflowEngine

- CleanUp
- CleanUp/Rules
- CleanUp/Rules/DefaultCleanup
- CleanUp/Rules/Rule1
- DRA
- Performance
- Reporting
- Reporting/CustomMapping
- Reporting/DB
- WorkflowEngine

Settings for section CleanUp

Key	Value	Type
BulkSize	200	integer
EnableCleanup	true	boolean
Protected		string

2. Modify the following key as needed:

Parameter	Description	Default
BulkSize	Defines how many process objects can be cleaned up in a single run. The maximum value is 10,000. The value you set for BulkSize and the frequency of cleanup task execution scheduled in Windows Task Scheduler must be calculated carefully in order to cleanup a sufficient number of process objects.	200

3. Select the section Cleanup/Rules/DefaultCleanup.

Select a profile: WorkflowEngine

Sections for profile WorkflowEngine

- CleanUp
- CleanUp/Rules
- CleanUp/Rules/DefaultCleanup**
- CleanUp/Rules/Rule1
- DRA
- Performance
- Reporting
- Reporting/CustomMapping
- Reporting/DB
- WorkflowEngine

Settings for section CleanUp/Rules/DefaultCleanup

Key	Value	Type
Filter	<filter><and><equal var='_State'>2</equal><equal var='processErrorCount'>0</equal><equal var='taskLifeCycle'>2</equal><equal var='workflowHasWarnings'>>false</equal></and></filter>	string
MinimumAge	1440	integer
Types	MAP_Delete, P_FileBox_Cleanup, P_FileBox_GetVolumeInfo, P_FileBox_Import, P_FileBox_IngestFromOp1a.wf, P_FileBox_Init, P_FileBox_OutgestToOp1a.wf, P_FileBox_Park, P_FileBox_Register, P_FileBox_Transcode	string

4. Modify the following keys as needed:

Parameter	Description	Default
Filter	Attribute filter given as XML. The format is that of the Workflow Engine methods GetWorkflows2Ex and GetWorkflows3Ex. If not provided, no additional filter is applied.	<filter><and> <equal var='_State'>2</equal> <equal var='processErrorCount'>0</equal> <equal var='taskLifeCycle'>2</equal> <equal var='workflowHasWarnings'>>false</equal> </and></filter>
MinimumAge	Defines the time in minutes that elapse before a process can be cleaned up after it has terminated. If the value of the key is set to 0, the process can be cleaned up immediately after it has terminated. The initial value of 1440 minutes represents one day.	1440
Types	The names of the workflow types to which the rule applies, given as a comma-separated list. The list must contain at least one workflow.	MAP_Delete, P_FileBox_Cleanup, P_FileBox_GetVolumeInfo, P_FileBox_Import, P_FileBox_IngestFromOp1a.wf, P_FileBox_Init, P_FileBox_OutgestToOp1a.wf, P_FileBox_Park, P_FileBox_Register, P_FileBox_Transcode

Rewrapping Cleanup

Default schedule: once a day at 4 am.

For information on how to change the schedule, see [“Changing the Schedule of a Task” on page 180](#).

Using the default configuration, this job cleans up finished media processing jobs from the database tables. Do not change retention and other configuration.

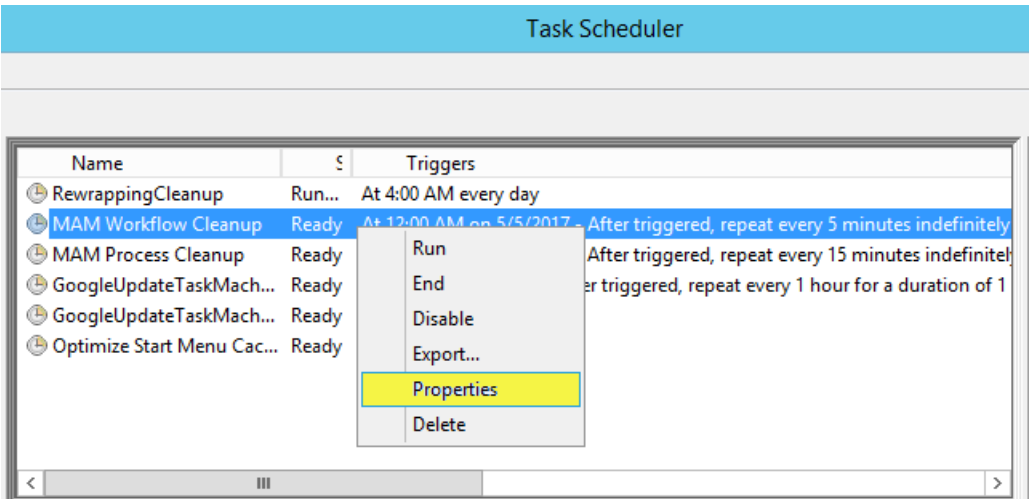
Changing the Schedule of a Task

To change the schedule of a task:

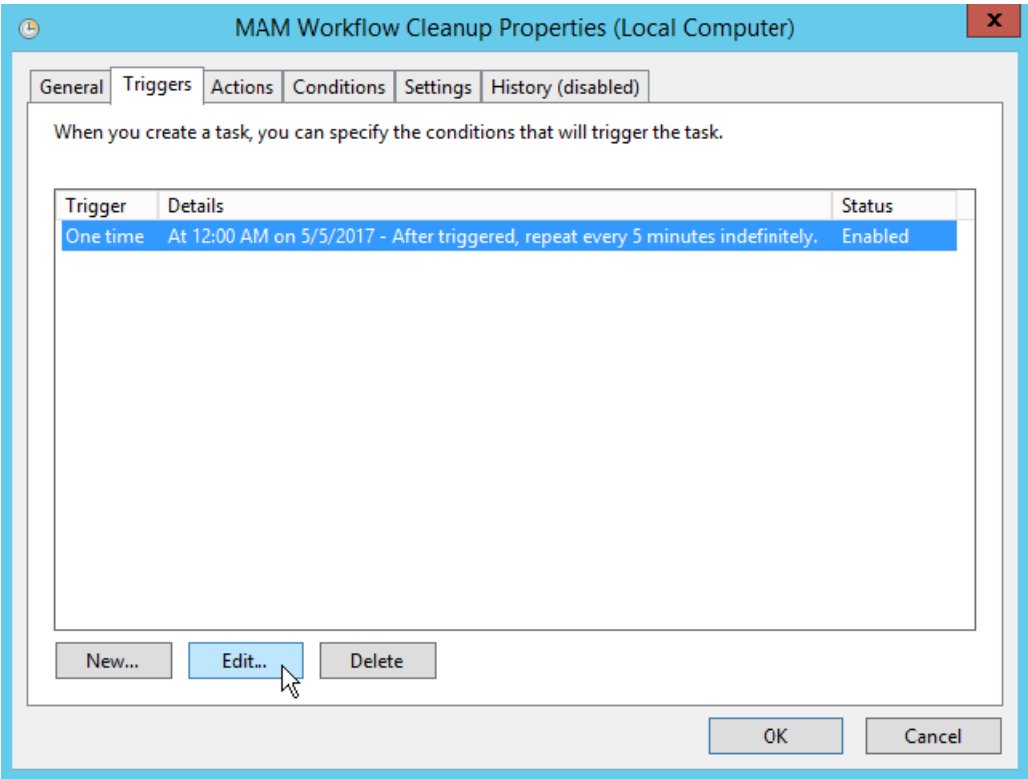
- 1. Start Windows Scheduler.



- 2. In the context menu of the task that you want to modify, select “Properties”.



3. Select the Triggers tab and click Edit.



4. Modify the trigger settings and click OK.

The screenshot shows the 'Edit Trigger' dialog box with the following settings:

- Begin the task:** On a schedule (dropdown)
- Settings:**
 - ☒ One time
 - ☐ Daily
 - ☐ Weekly
 - ☐ Monthly
- Start:** 5/ 5/2017 (calendar icon) 12:00:00 AM (time spinner)
- ☐ Synchronize across time zones
- Advanced settings:**
 - ☐ Delay task for up to (random delay): 1 hour (dropdown)
 - ☒ Repeat task every: 10 minutes (dropdown) for a duration of: Indefinitely (dropdown)
 - ☐ Stop all running tasks at end of repetition duration
 - ☐ Stop task if it runs longer than: 3 days (dropdown)
 - ☐ Expire: 5/11/2018 (calendar icon) 3:58:07 PM (time spinner)
 - ☐ Synchronize across time zones
 - ☒ Enabled
- Buttons:** OK (highlighted with a mouse cursor), Cancel

5. Click OK.

