## Interplay® | Router Control
### Version 3.7.1 ReadMe

<table>
<thead>
<tr>
<th>Date Revised</th>
<th>Changes Made</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 07, 2016</td>
<td>See <a href="#">Changes for v3.7.1</a>.</td>
</tr>
<tr>
<td>November 21, 2016</td>
<td>Added support for Imagine Communications Platinum router LRC v1.3. See <a href="#">New Features in Release v3.7</a> and <a href="#">Supported Controller Types and Protocols</a>.</td>
</tr>
<tr>
<td>August 10, 2016</td>
<td>Fixed issue that prevented using the parking feature with multiplex routing. See <a href="#">Changes for v3.6.1</a>.</td>
</tr>
<tr>
<td>June 30, 2016</td>
<td>Added new Park on Route Failed feature for v3.6. See <a href="#">New Features in Release v3.6</a>.</td>
</tr>
<tr>
<td>May 13, 2016</td>
<td>Added support for the Evertz Magnum controller and embedded audio configurations with this controller. See <a href="#">New Features in Release v3.6</a>.</td>
</tr>
<tr>
<td>September 30, 2015</td>
<td>Corrected the tested software version for the Harris Broadcast controller. See <a href="#">Supported Controller Types and Protocols</a>.</td>
</tr>
<tr>
<td>June 24, 2015</td>
<td>Fixed issue on Network Connection tab in the Router Control Configuration panel that disabled some options. See <a href="#">Changes for v2.5.1</a>.</td>
</tr>
<tr>
<td>June 30, 2014</td>
<td>Rebranded product; removed CaptureManager support; added support for x64 components. See <a href="#">Compatibility Notes</a>, Added information on <a href="#">Crosspoint Names and Aliases</a>.</td>
</tr>
<tr>
<td>December 18, 2013</td>
<td>Added support for Harris Platinum router LRC v1.1 because of required Harris firmware upgrade. See <a href="#">New Features in Release v2.4.6</a>.</td>
</tr>
<tr>
<td>September 10, 2013</td>
<td>Added support for Capture v1.7.5, v1.6.5, and ASF v1.7.0. See <a href="#">New Features in Release v2.4.5</a>.</td>
</tr>
<tr>
<td>June 18, 2013</td>
<td>Added support for Harris Platinum router and Interplay Capture v1.7.</td>
</tr>
</tbody>
</table>
### Important Information

Avid recommends that you read all the information in this ReadMe file thoroughly before installing or using any new software release.

**Note:** Search the Avid Knowledge Base (http://www.avid.com/support) for the most up-to-date ReadMe file, which contains the latest information that might have become available after the documentation was published.

This document describes compatibility issues with previous releases, hardware and software requirements, software installation instructions, and summary information on system and memory requirements, when applicable. This document also lists any hardware and/or software limitations.
Contents

Compatibility Notes ................................................................................................................................................... 5
Interplay | Capture ................................................................................................................................................... 5
Avid Service Framework ........................................................................................................................................ 5
Hardware Requirements ........................................................................................................................................ 5
Interplay Router Control Route Engine Server .................................................................................................. 5
Workstation (Crosspoints Monitor only) ........................................................................................................... 5
Installation Notes ....................................................................................................................................................... 6
Interplay | Router Control 64-bit Migration ........................................................................................................... 6
Interplay Router Control Server ............................................................................................................................ 6
Avid CaptureManager ........................................................................................................................................... 6
Upgrade Notes ....................................................................................................................................................... 7
  Upgrading Router Control 2.0 with an Encore Plug-in to Router Control v2.x ................................................ 7
New Feature in Release v3.7 ..................................................................................................................................... 7
New Features in Release v3.6 .................................................................................................................................... 7
  Park on Route Failed ............................................................................................................................................. 7
Interplay | Router Control Versions ....................................................................................................................... 7
  Support for the Evertz Magnum Controller ........................................................................................................ 8
  Embedded Audio with the Evertz Magnum Controller ......................................................................................... 8
New Features in Release v2.5.1 .................................................................................................................................. 8
New Features in Release v2.5 .................................................................................................................................... 8
New Features in Release v2.4.6 .................................................................................................................................. 8
New Features in Release v2.4.5 .................................................................................................................................. 8
New Features in Release v2.4 .................................................................................................................................... 8
New Features in Release v2.3 .................................................................................................................................... 8
  Multiplex Routing .................................................................................................................................................. 8
    Configuring Multiplex Routing .......................................................................................................................... 9
    Creating Multiplex Router Teams ................................................................................................................... 15
    Creating a Channel Pool Destination to Use with Multiplex Router Teams ................................................... 17
    Creating a Recording with a Multiplex Router Team ........................................................................................ 19
  Troubleshooting ............................................................................................................................................... 21
New Features in Release v2.1 .................................................................................................................................. 23
  Specifying the Network Interface with Multiple NICs ........................................................................................ 23
Hardware and Software Changes ........................................................................................................................... 24
Changes for v3.7.1 ............................................................................................................................................... 24
  Modify Magnum plugin to manage the crosspoint locked state correctly .......................................................... 24
Version 3.7.1 ReadMe

Fix for Intermittent Loss of Devices for NV9000 Plugin ................................................................. 24
Changes for v3.6.1 .............................................................................................................................. 24
Fix for Using the Parking Feature with Multiplex Routing ................................................................. 24
Changes for v2.5.1 .............................................................................................................................. 24
Fix for Issue in the Network Connection Tab .................................................................................... 24
Changes for v2.2.0 .............................................................................................................................. 25
Support for Miranda NVision NV 9000 Route Controllers .............................................................. 25
Support for Grass Valley Jupiter CM-4000 controller software version 7.9.1 .............................. 25
Changes for v2.1.3 .............................................................................................................................. 25
Support for Utah SC-4 controller software version 2.0.x ................................................................. 25
Changes for v2.1 ................................................................................................................................ 25
Support for Evertz and Utah Scientific Route Controllers .............................................................. 25

Known Limitations ............................................................................................................................. 25
CaptureManager No Longer Supported ............................................................................................ 25
Crosspoint Names and Aliases ........................................................................................................... 25
Jupiter VM 3000 Controller No Longer Supported ............................................................................ 25
Debug Form Application ...................................................................................................................... 25
Network Routing not used with Utah Plug-in ..................................................................................... 26
Route Controller IP Addresses must always be Static IP addresses .................................................. 26
Supported Controller Types and Protocols ........................................................................................ 26
Split Levels ........................................................................................................................................ 27
Protect and Lock ................................................................................................................................. 27

Documentation Notes and Errata ...................................................................................................... 27
Installation and Configuration Guide .................................................................................................. 27
Technical Support Information .......................................................................................................... 28
Accessing Online Support .................................................................................................................. 28
Copyright and Disclaimer .................................................................................................................. 29
Compatibility Notes

Interplay | Capture
This version of Interplay Router Control is qualified for use with Interplay Capture version v3.4 or later.

Avid Service Framework
This version of Interplay Router Control is qualified for use with Avid Service Framework version 1.8.x or later.

Hardware Requirements

Interplay Router Control Route Engine Server
- Avid AS3000 Server Platform with a minimum of:
  - Processor: Xeon 5335 quad core 2.0 GHz
  - Memory: 12 GB RAM
  - Storage Space: 1 TB SW Raided Operating System Hard Drive
  - Operating System: Windows Server 2008 R2 SP1
- HP DL630 Server Platform with a minimum of:
  - Processor: Xeon 5335 quad core 2.0 GHz
  - Memory: 12 GB RAM
  - Storage Space: 1 TB SW Raided Operating System Hard Drive
  - Operating System: Windows Server 2008 R2 SP1, Windows Server 2012 R2

NOTE: Windows Server 2012 R2 support on Dell DL630 servers was added in Capture v2.2.

NOTE: You must set up the Interplay Router Control service to run in Windows 7 compatibility mode if running on Windows Server 2012. This is not necessary for servers running on Windows 2008.

- Other Hardware: The following hardware is shipped separately and installed by Avid field support staff (Only if RS 422 is required by the route controller).
  - Digi Port Server

NOTE: Router Control v2.5.1 and later is not qualified to run on virtual machines. You may run Interplay Capture v2.2 and greater on virtual machines, and Router Control on AS3000 or DL630.

Workstation (Crosspoints Monitor only)
- Processor: 3 GHz single CPU or better
- Memory: 4 GB RAM or higher
Installation Notes

Interplay | Router Control 64-bit Migration

Interplay Router Control v2.5 and later is an x64 (64-bit) application and is designed to work with other x64 components. When you migrate your Interplay Router Control system from an x86 (32-bit) to an x64 installation, you must perform the following steps:

- Uninstall all x86 components on any Capture Server and Router Control Server that is being migrated:
  - Uninstall the x86 version of Avid Service Framework (ASF).
  - Uninstall the x86 version of Avid License Service (ALS) (if installed on the same server).
  - Uninstall the x86 version of Interplay Capture Service.
  - Uninstall the x86 version of Interplay Capture client.
  - Uninstall the x86 version of Interplay Administrator.
  - Uninstall the x86 version of Avid Router Control.
- Remove all manually-created shortcuts on your system desktop, in the start menu, and on all task bars. These existing shortcuts point to the x86 version of Interplay Router Control.
- Run the migration tool included in the Capture installer after you uninstall all x86 products.
- Install the x64 version of ASF and ALS, as well as other x64 Capture and x64 Router Control components.
- Copy any custom configuration files and the values in those files - for example, workgroup.properties, logging.properties, jini - to the corresponding x64 Capture, ASF, Router Control directories (for example, Program Files/Avid/Capture/).

Note: The migration tool is only needed when moving from 32-bit to 64-bit Interplay Router Control. Router Control versions v2.4 and earlier are 32-bit. Router Control v2.5 and later are 64-bit.

Note: The Avid License Service steps are only needed if you install ALS on the same server as Router Control. If Router Control and ALS are installed on different servers, you can skip the steps related to ALS.

When installing Avid License Service, you must install the VS2012 x64 redistributable. You can download the installer (vcredist_x64.exe) from the Microsoft support Web site. The Avid Service Framework (ASF) installer for Interplay Capture also includes the VS2012 redistributable. When you install the x64 version of ASF, the installer detects if VS2012 is present on your system. The ASF installer displays a dialog box, asking permission to install VS2012. If the dialog box does not appear, you can manually install VS2012 using the installer from Microsoft.

Note: When you perform a clean install on a server that does not have any Avid software installed on it, a number of warning dialogue boxes display that refer to issues related to migrating from a 32-bit to a 64-bit installation. This occurs even though the server does not have any 32-bit Avid software installed. You can ignore these warning messages, as they do not apply to a new, 64-bit installation.

Interplay Router Control Server

For installing redundant systems Avid recommends installing one server at a time and configuring it completely prior to installing and configuring the second server.

Avid CaptureManager

Avid CaptureManager is not supported for use with Interplay Router Control v 2.5.
Upgrade Notes

Upgrading Router Control 2.0 with an Encore Plug-in to Router Control v2.x

For customers running Router Control v 2.0, with the Encore plug-in and using Ethernet connectivity you must re-enter the controller's hostname/IP address and port number after the upgrade to Router Control v2.x. The hostname/IP and port number settings are not preserved during a v2.0 to v2.x. Failure to do so prevents the Avid Route Engine service encore plug-in from connecting to the controller.

New Feature in Release v3.7


New Features in Release v3.6

Park on Route Failed

The Park command allows Interplay Router Control to set a destination crosspoint to a Park channel, usually a Black or a Pattern source. You can now select an option in the Avid Service Configuration tool to send a Park command in the event of a route failure.

To set the Park on Route Failed option:

1. Select Start > All Programs > Avid > Service Framework > Service Configuration.
2. Select your workgroup and click Select.
3. Click the route engine service for your controller.

The Avid Service Configuration dialog box opens.

4. Select Park on route failed.

Interplay | Router Control Versions

Starting with Interplay Router Control v3.6, releases match the corresponding releases of the Avid Interplay Production components and are labeled with the same version number. References to earlier versions of Interplay Router Control continue to use the version numbers at the time of those releases.
Support for the Evertz Magnum Controller

Interplay Router Control supports the Evertz Magnum controller. This includes support for embedded audio with this controller. See Supported Controller Types and Protocols.

For more information about the Evertz Magnum controller, contact Evertz Support at http://www.evertz.com/contact/.

Embedded Audio with the Evertz Magnum Controller

Interplay Router Control supports the Embedded Audio mode with the Evertz Magnum controller with up to 17 levels (1 video and 16 audio) and Embedded Audio configurations.

New Features in Release v2.5.1

There are no new features for v2.5.1. This release fixes one issue. See Changes for v2.5.1.

New Features in Release v2.5

Interplay Router Control v2.5 now supports x64 (64-bit) systems and works with x64 components – for example, Interplay Capture v2.0.

New Features in Release v2.4.6

Router Control v2.4.6 introduces support for Harris Platinum router using LRC v1.1 protocol. Harris Platinum firmware v.43b19 supports LRC v1.1 protocol. See Supported Controller Types and Protocols.

Note: Router Control v2.4 and v2.4.5 only support the Harris Platinum LRC v1.0 protocol. Most Harris Platinum routers will be updated by Harris with newer versions of firmware that support the LRC v1.1 or greater protocol. You need to update to Router Control v2.4.6 to use newer Harris Platinum firmware.

New Features in Release v2.4.5

There are no new features in Router Control v2.4.5. This version was recompiled to be compatible with Capture v1.6.5, Capture v1.7.5, and Avid Service Framework v1.7.0. See the Compatibility Matrix in the Capture v1.7.5 and v1.6.5 Readmes.

Note: See the Capture v1.7.5 or v1.6.5 ReadMe for updated information on Digiport wiring and setting baud rates when using VTRs.

New Features in Release v2.4

Router Control v2.4 introduced support for the Harris Platinum router using LRC v1.0. See Supported Controller Types and Protocols.

New Features in Release v2.3

Router Control v2.3 introduced multiplex routing.

Multiplex Routing

Multiplex routing allows you to use up to two router groups at your site. For example, you could have one group of Evertz Xenon Quartz routers and another group of Harris Platinum routers. You need one license for each group. See your Avid representative for information on obtaining a license.
Configuring Multiplex Routing

To configure multiplex routing, you use three Route Engine services:

- Two services control the physical router groups. There is one service for each group (A and B).
- A third, multiplex service, controls and displays the combined A and B router groups.

When you first install Router Control v2.3, one Route Engine service is enabled by default. You can use the single service in the typical one router configuration as described in the Avid Router Control Installation and Configuration Guide. If you want to use multiplex routing, use the Workstation Properties tool to enable two additional Route Engine services.

**To enable Route Engine services for multiplex routing:**

5. Open the Workstation Properties tool using one of the following methods:
   a. Open the Interplay Administrator tool and click Workgroup Properties in the Avid Services area.
   b. Select Start > All Programs > Avid > Avid Service Framework > Avid Workgroup Properties.

The Workstation Properties tool opens.

6. Click the Advanced button.

7. The Avid Services window opens showing the three Avid Route Engine services. Two are disabled by default. If you plan to use multiplex routing you need to enable the services.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avid Interplay Capture Clip</td>
<td>This service monitors, creates, and updates clips on Interplay for the Interpl...</td>
</tr>
<tr>
<td>Avid Interplay Capture Serv</td>
<td>This service is the main Interplay Capture service containing the data store a...</td>
</tr>
<tr>
<td>Avid Interplay Shared Storage</td>
<td>This service provides a list of workspaces and health from shared storage to...</td>
</tr>
<tr>
<td>Avid License Service</td>
<td>Provides product and feature licenses</td>
</tr>
<tr>
<td>Avid Lookup Service</td>
<td>Acts as the Lookup mechanism for discovering other services in the workgro...</td>
</tr>
<tr>
<td>Avid Machine Monitoring Ser</td>
<td>The Machine Monitoring Service monitors the health of the host it is running ...</td>
</tr>
<tr>
<td>Avid Route Engine Service</td>
<td>A Service that provides the control of routers</td>
</tr>
<tr>
<td>Avid Route Engine Service A</td>
<td>A Service that provides the control of routers</td>
</tr>
<tr>
<td>Avid Route Engine Service B</td>
<td>A Service that provides the control of routers</td>
</tr>
<tr>
<td>Avid Service Starter Service</td>
<td>Starts other Avid Service Framework Services when the machine state is vali...</td>
</tr>
<tr>
<td>Avid System Configuration S</td>
<td>An Avid Service Framework Service for storing shared System-wide Informations...</td>
</tr>
<tr>
<td>Avid Time Synchronization S</td>
<td>Makes sure that all Avid Service Framework Services and machines are in time...</td>
</tr>
</tbody>
</table>

8. If the A and B Route Engine services are disabled, enable and start both services.
9. Open the Service Configuration tool and select the Capture server to view the three services.

![Service Configuration Tool Image]

Note: The router groups in this example have already been named. When you first open the Service Configuration tool after a new installation, the services have default names.

**To define a router group for the first physical router group:**

1. Select a Route Engine service and select the Plug-in Chooser tab.
2. Select the appropriate plugin from the menu. The following illustration selects the Evertz Quartz Standard plug-in.
Note: By default there are five tabs for each Route Engine service. After you select a plug-in, the number of tabs varies depending on the plug-in software.

Note: This example uses one physical router (Evertz Quartz). We selected the emulator plug-in for the second router and named it shire-capture1-router2. In a production environment you will select two physical routers. Do not use emulators in a production environment.

3. Click the Router Group Name tab and type in a name for the router group. The following illustration shows the name of the Evertz Quartz group.

4. Click Apply
   The following illustration shows the Route Engine service in this example with the new name.
5. Click the Crosspoints tab and click the Query Controller button. The system displays all of the sources, destinations, and levels available to the router group.

6. Select the sources, destinations, and levels that Capture will use. For additional information, see the Avid Router Control Installation and Configuration Guide.

7. Click Apply.

To define a router group for the second physical router group:

1. In the Service Configuration tool, select the Route Engine service that will control the second router group.

2. Click the Plug-in Chooser tab, select the appropriate plugin from the menu, and click Apply.

3. Click the Router Group Name tab, type in a name for the router group, and click Apply.

4. Click the Crosspoints tab and click the Query Controller button. The system displays all of the sources, destinations, and levels available to the router group.

5. Select the sources, destinations, and levels that Capture will use. For additional information, see the Avid Router Control Installation and Configuration Guide.

6. Click Apply.

Now you have two physical router groups defined. The next step is defining a multiplex router group to control both groups.

To define a multiplex router group:

1. In the Service Configuration tool, select the Route Engine service that will be used to define the multiplex group.

2. Click the Plug-In Chooser tab and select multiplex from the menu. Then click Apply.

3. Click the Router Group Name tab and type in a name for the multiplex group. For consistency, keep the text “multiplex” as part of the name. In this example, the name is multiplex-arc1.

4. Click Apply.

You will use the multiplex router group to control the two physical router groups.
To enable multiplex routing:

1. Open the Interplay Capture interface by first opening the Interplay Administrator tool and then opening Capture Settings.

2. In the Routing area, select “Automated routing using router group” and enter the name of the Route Engine Service used for multiplex routing.

3. Based on the needs of your site, select or deselect the three radio buttons below the text box. The available options are as follows:
   - Allow users to manually route a source to an external monitor
   - Allow users to assign an external monitor to a recording
   - Automatically route first source to the default monitor when a recording is clicked in the timeline
To define prefixes for the router groups:

1. In the Service Configuration tool, select the Route Engine service for the multiplex routing group and click the Connection tab.
2. Enter the names of the routing groups and type in a corresponding prefix value for each group.

   The prefix allows you to differentiate the router groups when they are displayed on the multiplex routing Crosspoints tab. The following illustration shows the prefixes defined for this example.

3. Click Apply.

   Note: The Multiplex portion of the Connection tab is only available when you select the Route Engine service for the multiplex routing group.

To display the routing group values in the multiplex router group Crosspoints view:

1. Select the Route Engine service for the multiplex routing group and click the Crosspoints tab.
2. Click the Query Controller button.
3. (option) Click the IDX tab to sort by index. This groups the sources and destinations in preparation for creating teams.

The following illustration shows all of the sources, destinations levels that are available from the two routing groups. The prefixes are added to each value.

4. Click Apply.

Creating Multiplex Router Teams

After you configure multiplex routing, you can start using the individual router sources and destinations. You also have the option of creating source teams. Source teams allow you to perform simultaneous recordings from two different router groups.

Note: It is possible to set up virtual routing crosspoints that are not reflected in your actual physical router connections. Make sure that your routing wiring matches your virtual signal paths.
To create multiplex routing teams:

1. In the Service Configuration tool, select the multiplex router group and click the Crosspoints tab.
2. Click the Query Controller tab to display all the available sources and destinations and click the IDX column header to sort by index.

3. Select a router from each group. In this example, select one router with the Ev prefix and one with the R2 prefix.

The Create Team button becomes available when you select a router from each group.
4. Click the Create Team button.

The system creates a team and the following occurs:

- The two sources are grayed out showing that they are no longer available for selection.
- Router Control adds a new team member to the list. The name is a combination of the multiplex group name and an integer value. The integer represents the number of teams that have been created so far.
- The team name is added to the Alias column for each of the selected routers.

The following illustration shows the new team.

5. (option) Click the Alias tab next to the new team name and create an alias for the team. The alias will help identify the team when you use it with Capture.

Creating a Channel Pool Destination to Use with Multiplex Router Teams

Multiplex routing allows you to define source teams from different router families. This section describes how to create corresponding destination channel pools. This allows you to assign two sources to two different destinations.

There are two steps to create a destination channel pool:

1. Combine two sources from the multiplex routing group into a channel team.
2. Add the newly created channel team to a channel pool.

After you create the channel pool you can select it as a recording destination.
To create a channel team:

1. Open Capture Settings from the Interplay Administration tool and click the Channel Teams tab.
2. Add two appropriate destinations from the multiplex routing group to the channel team.

In this example, the channel team name is arc1_5Team. See the Capture documentation for details on creating a channel team.

Note: It is possible to set up virtual routing crosspoints that are not reflected in your actual physical router connections. Make sure that your routing wiring matches your virtual signal paths.

To create a channel pool:

1. Open Capture Settings from the Interplay Administration tool and click the Channel Pool tab.
2. Create a channel pool from the channel team created in the previous example.

In this example, the channel pool name is arc1_5Pool. See the Capture documentation for details on creating a channel pool.
Creating a Recording with a Multiplex Router Team

This topic describes how to perform a recording with a multiplex routing source team and a channel pool destination.

To create a channel pool:

1. Open Capture and create a new recording.
2. Click the Sources menu and select the multiplex routing source team.
3. Scroll down the Channels selection area and select the destination Channel pool.

4. Begin the recording.

5. (option) Open the Event log to verify that the recording is using the correct source team and channel pool as shown in the following illustration.

The above illustration shows the following:

- Two channels are being recorded simultaneously. The source is the multiplex source team created in this example.
- The channel pool is the destination channel pool created in this example.
- The Channel column identifies the physical VTRs that each channel is being recorded to. In this case the VTRs are AirSpeed Multi Stream systems (abbreviated with AMS).
Troubleshooting

Switching to an incorrect router source during a recording

Capture v1.6 introduced support for switching router sources during a recording. When using multiplex routing, you must be careful to switch to a router source that is from the same router group. For this release, if you switch to a router source that is not part of the same router group, the recording fails and the system displays incorrect information.

This example shows the results of switching to a router source that is in a different router group. The original source is EV_source-009. The user changed sources during the recording and selected R2_source 006. The different prefixes show that the sources are from different router groups.

If you switch to a router source that is in a different router group, the following information is displayed in the Capture user interface:

- The Event Log incorrectly shows that the switch was made to the new source.
- The General tab on the Schedule Item Detail window incorrectly shows the change to the new source.
- The recording on the schedule incorrectly updates to show the new source.
- The Channel Monitor panel incorrectly shows the new source.

![Channel Monitor Panel Incorrectly Showing New Source]  

- The Router Monitor panel continues to show the old source.

![Router Monitor Panel Continuing to Show Old Source]  

These problems will be fixed in a future release.

Note: It is possible to set up virtual routing crosspoints that are not reflected in your actual physical router connections. Make sure that your routing wiring matches your virtual signal paths.

Deselecting a router used to create a multiplex source team

If you deselect one of the routers that are used to create a multiplex source team, the team name is highlighted in red.

In the following example, the source “source 002” was deselected in the crosspoints tab for the physical router group after the multiplex source team was created.
The next time you click Query Controller in the multiplex crosspoints tab, the system highlights the team name in red as shown in the following illustration.

New Features in Release v2.1

This section provides information on any previously undocumented enhancements or new features added to this release.

Specifying the Network Interface with Multiple NICs

A new feature was added to Avid Router Control v2.1 so that now, on a computer having more than one network interface card (NIC) installed in it, an administrator can specify the network interface with which the Ethernet based controller uses to communicate with Router Control.

This new feature provides the ability to keep the network, which has the route controller in it, completely isolated from the network in which the rest of the Avid Service Framework based software is operating. This feature applies to all Router Control plug-ins that support Ethernet capable route controllers. If no network is specified, the default network and its associated NIC are used.
Select a medium for the plug-in to use when communicating with the controller. The serial port or Ethernet Binding Address is in reference to the machine hosting the Avid Route Engine service, which is not necessarily the same machine displaying the configuration panel in the Avid Service Configuration application.

<table>
<thead>
<tr>
<th>Parking</th>
<th>Protecting</th>
<th>Capture/Messaging Bridge</th>
<th>Users/Service Configuration</th>
<th>Binding/Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet</td>
<td>Serial</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Address: 192.168.0.59
Port: 4001
Address: 192.168.6.11

Note: Set or confirm that the network interface that is connected to the Avid Service Framework workgroup is the first adapter in the network adapter binding order for Windows. The network interface used for the isolated network for the route controller should not be listed first in the binding order when using this multiple NIC support for Router Control 2.1.

**Hardware and Software Changes**

**Changes for v3.7.1**

**Modify Magnum plugin to manage the crosspoint locked state correctly**

On take crosspoint, if the crosspoint is already unlocked the Magnum will not send an unlock confirm response. The magnum plugin was expecting an unlock confirmation. This was fixed.

**Fix for Intermittent Loss of Devices for NV9000 Plugin**

When using "Query Controller," devices would intermittently “disappear” from the destinations table.

**Changes for v3.6.1**

**Fix for Using the Parking Feature with Multiplex Routing**

When using multiplex routing, the parking feature was disabled. This prevented you from specifying a Router Control park source for each router engine. This has been fixed, and you can now set a park source when you use multiplex routing.

**Changes for v2.5.1**

**Fix for Issue in the Network Connection Tab**

For some new installations, some of the connection options were disabled in the Network Connection tab in the Router Control Configuration panel. This has been fixed, and you can now set a park source for each
Route Engine in multiplex routing. Each Route Engine will now set the park source when the recording ends.

**Changes for v2.2.0**

**Support for Miranda NVision NV9000 Route Controllers**
Miranda NVision NV9000 route controllers are now supported.

**Support for Grass Valley Jupiter CM-4000 controller software version 7.9.1**
Route controllers running the Grass Valley CM-4000 controller version 7.9.1 are now supported.

*Note: Jupiter AccuSwitch mode software versions older than v7.9.1 on the CM-4000 are known to not work with Router Control 2.2.x Jupiter plug-in. Jupiter Express mode has only been tested with v7.9.1. Other versions of Jupiter software have not been test with the CM-4000.*

**Changes for v2.1.3**

**Support for Utah SC-4 controller software version 2.0.x**
Route controllers running the Utah SC-4 route controller version 2.0.x (RCP3 protocol) are now supported.

**Changes for v2.1**

**Support for Evertz and Utah Scientific Route Controllers**
Evertz route controllers running the Quartz Standard Protocol are now supported. Utah Scientific route controllers running the RCP3 protocol are now supported.

**Known Limitations**

This section provides information on known limitations that were not addressed in this release. Any available workaround procedures are also documented, when possible.

*Note: For limitations related to compatibility of this release with previous versions/other products, see the section of this document entitled, Compatibility Notes.*

**CaptureManager No Longer Supported**
Starting with Interplay Router Control v2.5, CaptureManager is no longer supported.

**Crosspoint Names and Aliases**
When creating names and aliases for Router Crosspoints, the only allowed characters are a-z, A-Z, 0-9, and _ (underscore). Using spaces and other characters such as dashes are not supported by Router Control and many Router systems. It is a best practice to use names with the characters a-z, A-Z, 0-9, and _.

*Note: In the field we have seen routes that have failed with no apparent reason. Many times it is because of incorrectly formatted names or aliases. Removing spaces and other illegal characters usually resolves the failed routes because both Router Control and Router systems can’t process names with unsupported characters.*

**Jupiter VM 3000 Controller No Longer Supported**
Starting at Router Control v2.3, Avid no longer supports the Jupiter VM 3000 controller because it is an older generation controller that is no longer supported by the OEM.
Debug Form Application

The configuration data applied/saved from the Route Engine Service running as a service is not available to the Debug Form application if it is run under Windows versions later than Windows XP or Server 2003.

Workaround: When running the Debug Form application, the Avid support may do one of the following:

- Copy the contents of the directory created by the running Route Engine service, which holds the configuration data persisted to disk, to the appropriate location where the Debug Form application maintains the same type of files.
- After starting the Debug Form application, open the Avid Service Framework, Service Configuration application, re-select the crosspoint inclusion sets, re-select the park source, and re-select the appropriate plug-in type. In most cases, the router group name can remain the default.

Network Routing not used with Utah Plug-in

When using the Utah plug-in, Avid recommends that there is no network routing for the network connection from the machine on which the Avid Route Engine service Utah plug-in is running and the route controller.

Route Controller IP Addresses must always be Static IP addresses

Interplay Router Control supports IP connectivity to certain types of route controllers. Router Control requires that the IP address on the controller to which it connects be a static IP address. If DHCP assigned IP addresses are used, the connectivity between Router Control and the route controller will break when the DHCP server assigns the controller addresses that are different than that for which Router Control is configured.

Workaround: Do not use anything other than Static IP addresses for the route controller addresses to which Router Control will connect.

Supported Controller Types and Protocols

Only the following combinations of specific Controller types and their native protocols are supported for Avid Router Control v2.2.0 and later.

Note that Protocol Translators (Emulators) are not supported.

The Tested Controller Software column lists the versions of the controller software that have been tested in the QA lab and have been demonstrated to be compatible with Router Control v3.7. Other versions of controller software may work, unless otherwise noted, though they have not been specifically tested in the lab.

<table>
<thead>
<tr>
<th>Controller Type</th>
<th>Model</th>
<th>Communication</th>
<th>Protocol</th>
<th>Tested Controller Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagine Communications</td>
<td>Platinum (Legacy)</td>
<td>Ethernet</td>
<td>LRC V1.3</td>
<td>V4.6.B13</td>
</tr>
<tr>
<td>Imagine Communications</td>
<td>Platinum IP3</td>
<td>Ethernet</td>
<td>LRC V1.3</td>
<td>V2.0</td>
</tr>
<tr>
<td>Harris Broadcast</td>
<td>Platinum</td>
<td>Ethernet</td>
<td>LRC V1.1</td>
<td>V4.3.B19</td>
</tr>
<tr>
<td>Utah Scientific</td>
<td>SC-4</td>
<td>Ethernet</td>
<td>RPC3</td>
<td>v1.9.4, v1.9.6, v2.0.2</td>
</tr>
</tbody>
</table>
### Controller Type

<table>
<thead>
<tr>
<th>Controller Type</th>
<th>Model</th>
<th>Communication</th>
<th>Protocol</th>
<th>Tested Controller Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evertz Magnum</td>
<td>Magnum</td>
<td>Ethernet</td>
<td>Quartz Standard Protocol (Magnum additions)</td>
<td>Magnum: V1.14.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Magnum Router: V2.16.3</td>
</tr>
<tr>
<td>Evertz Quartz</td>
<td>EQX Server &amp; Xenon</td>
<td>Serial or Ethernet</td>
<td>Quartz Standard Protocol</td>
<td>v5.22</td>
</tr>
<tr>
<td>Grass Valley</td>
<td>Encore 1.7.3 controller software</td>
<td>Serial or Ethernet</td>
<td>Router Control Language (RCL)</td>
<td>v1.7.4 v1.8.1 v1.8.2</td>
</tr>
<tr>
<td>Jupiter</td>
<td>CM-4000</td>
<td>Serial</td>
<td>ES-Switch Protocol</td>
<td>v7.9.1 (Note 1)</td>
</tr>
<tr>
<td>Miranda NVision</td>
<td>NV9000</td>
<td>Ethernet</td>
<td>NV9000</td>
<td>v6.0.19</td>
</tr>
<tr>
<td>Pro-Bel</td>
<td>Aurora &amp; Axis</td>
<td>Serial</td>
<td>SW-P-08</td>
<td></td>
</tr>
</tbody>
</table>

Note: Jupiter AccuSwitch mode software versions older than v7.9.1 on the CM-4000 are known to not work with Router Control 2.2.x Jupiter plug-in. Jupiter Express mode has only been tested with v7.9.1. Other versions of Jupiter software have not been tested with the CM-4000.

### Split Levels

Interplay Router Control v2.x does not support initiation of split levels from Avid clients. However, it does report the status of each level of each destination in the event that other non-Avid controller clients initiate split level takes.

### Protect and Lock

Interplay Router Control v2.x supports protecting source and destination route paths if the router supports it. If the router supports locking or unlocking, Router Control v2.1 will only protect but not lock a crosspoint even when the controller has the concept of both protecting and locking.

### Documentation Notes and Errata

This section contains information about updates or changes regarding documentation provided with the Interplay Router Control software.

### Installation and Configuration Guide


In Avid Service Framework, the user interface for each application was improved to provide a more efficient user experience. The UI for Diagnostics, Health Monitor, and Service Configuration now contain panels, rather than panes, that can be docked, floated, or hidden from view to best suit your workflow. As a result, the illustrations shown in the Avid Router Control Installation and Configuration Guide will appear slightly different than the newer version of the software you are using with your Router Control system. The illustrations in the Router Control Installation and Configuration Guide will be updated during the next scheduled revision of that document.
Technical Support Information

Most products feature a number of coverage options. Avid Assurance service offerings are designed to facilitate your use of Avid solutions. Service options include extended telephone coverage, automatic software maintenance, extended hardware warranty, and preferred pricing on replacement parts. Offerings and options may vary by product and are not available for all products.

For more information regarding Avid’s service offerings, visit www.avid.com/support or call Avid Sales at 800-949-AVID (800-949-2843).

Program availability and details might vary depending on geographic location and are subject to change without notice. Contact your local Avid office or your local Avid Reseller for complete program information and pricing. However, if you need help locating an Avid office or Avid Reseller near you, please visit www.avid.com or call in North America 800-949-AVID (800-949-2843). International users call 978-275-2480.

Accessing Online Support

Avid Online Support is available 24 hours per day, 7 days per week. Search the Knowledge Base to find answers, to view error messages, to access troubleshooting tips, to download updates, and to read/join online message-board discussions.

To access Avid Online Support:

➤ Go to www.avid.com/onlineSupport.

Note: Supplemental documentation for this release, if available, is provided on the Knowledge Base. For the latest up-to-date information, browse the Knowledge Base at Avid Online Support.
Copyright and Disclaimer

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

The software described in this document is furnished under a license agreement. You can obtain a copy of that license by visiting Avid’s Web site at www.avid.com. The terms of that license are also available in the product in the same directory as the software. The software may not be reverse assembled and may be used or copied only in accordance with the terms of the license agreement. It is against the law to copy the software on any medium except as specifically allowed in the license agreement.

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the express written permission of Avid Technology, Inc.

Copyright © 2016 Avid Technology, Inc. and its licensors. All rights reserved.

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

Adrenaline, AirSpeed, ALEX, Alienbrain, Archive, Archive II, Assistant Avid, Avid Unity, Avid Unity ISIS, Avid VideoRAID, CaptureManager, CountDown, Deko, DekoCast, FastBreak, Flexevent, FXDeko, iNEWS, iNEWS Assign, iNEWS ControlAir, Instinct, IntelliRender, Intelli-Sat, Intelli-sat Broadcasting Recording Manager, Interplay, ISIS, IsoSync, LaunchPad, LeaderPlus, Listsync, MachineControl, make manage move | media, Media Composer, NewsCutter, NewsView, OMF, OMF Interchange, Open Media Framework, Open Media Management, SIDON, SimulPlay, SimulRecord, SPACE, SPACEShift, Sundance Digital, Sundance, Symphony, Thunder, Titansync, Titan, UnityRAID, Video the Web Way, VideoRAID, VideoSPACE, VideoSpin, and Xdeck are either registered trademarks or trademarks of Avid Technology, Inc. in the United States and/or other countries.

All other trademarks contained herein are the property of their respective owners.

Interplay Router Control v3.7 ReadMe • 7 April 2017 • This document is distributed by Avid in online (electronic) form only, and is not available for purchase in printed form.