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### **REVISION HISTORY**

REVISION	DESCRIPTION	DATE
1.0	Original Release	Dec 2008
1.1	Updates throughout	June 2012



#### 1. OVERVIEW

Name Service allows names to be transferred from a Router, EQX or Magnum Server to UMD Windows and Ingest Source and Destination lists in Maestro. Names are hosted on the router or control system, and the MVP Server will automatically update as names are changed.

#### 2. **REQUIREMENTS**

- PC Based MVP Server (Not On-Board Server) running Kingston release or higher (Installer 2.12.x or above).
- EQX Server 2.2.0 or above, or Magnum Server is required for these instructions. Pre EQX Server 2.2.0 system does not support re-aliased ports for the Quartz Interface so customers may want to default to the previous.

#### 3. CONFIGURING EQX/MAGNUM SERVER

The server is required to have full control of the router's outputs, including the X-Link. If the router is a Xenon, the XE-FC is required, not the XE-FU.

In the server, create a "Quartz Interface", and add the router to it. Ensure that the order number matches the physical output of the router, inserting blanks, or reordering the outputs if required. Magnum 1.1.0 and above will remap the X-Link outputs of the router to be in a sequential order.

#### 4. CONFIGURING NAME SERVICE IN MVP SERVER

In most cases, to use Name Service, the router must be part of the MVP System.

System Setup requires "Use Name Service" to be selected. Optionally for debugging, under "Advanced Options", enter "-D Quartz" for additional routing information to be displayed in the system log. Please see Figure 1.

Name Service Configuration



🎁 System Setup Wizard			
System Information			
MVP System Manager needs to know some information about the system being added.			
Descriptive Name:			
Nameservice Demo			
Use NCP			
Use Sync			
Use SNMP			
Use GPI			
Use VGPI			
Symphony Protocol Support			
Use Notify			
Use Name Service			
Use RTR			
RTR Options:			
Run server in Active mode when System Manager starts			
Run server in Standby mode when System Manager starts			
Advanced Options:			
-D Quartz			
	< Back	Next >	Cancel

Figure 1: System Information

The "System Configuration" window, as illustrated in Figure 2, allows you to enable *Destination Echo* and *Name Sync*.

- Destination Echo will allow Maestro to place a router destination on the Monitor wall, so that whatever source is routed to that destination will be displayed on the wall.
- *Name Sync* will use Name Service to push the names from the System Controller to Maestro.



#### 🎁 System Setup Wizard

System Configuration				
	Properties set here an	ect now the server operates.		
Client Lock Timeout:	300	Time, in seconds, before we release an unrenewed client lock.		
Symphony Listen Port:	9750	The TCP port clients connect to.		
Second Symphony Liston Port:	9751	The second TCP port clients connect to.		
Destination Echo:	Yes	Allows a router destination to be assigned to a window. The window's source will then display whatever source is switched to that router destination.		
Destination Echo Port:	9678	The TCP port that Name Service and MVP Server will use for destination echo communication.		
Name Sync:	Yes	When enabled, router source and destination names will be retrieved and pushed to MVP clients. Names are only retrieved from routers that are part of your multiviewer system. Disable this option if you do not want names to be polled from your multiviewer routers. If you plan to retrieve names from an EQX Server, configure the EQX Server Profiles table in the Names Setup tab.		
Audio Transition Fade:	No	When enabled, audio will fade out/in when a transition is made on an AES output.		
Notify Display Changes:	No	When enabled the server will send display change notifications to notifyd.		
		< Back Next > Cancel		

Figure 2: System Configuration

Figure 3 shows a simple system with a single router (EQX) and a single display card (VIPA). The IP Address entered for the router needs to be the Cluster IP address of the EQX/Magnum Server.



Ú	🔋 System Se	etup Wizard		
	IP Address 10.10.10.10 10.10.10.11	Hardware Type EQX VIPA16_DUO_HS	Hardware cards are described to the system here. The order in which display cards and input cards are listed will determine the card's index in the system. Use the add button to add a new card, update to update the existing card, delete to remove a card, clear to clear the input boxes. The arrows move a selected card up and down in the list. Keyboard mode indicates what pressing enter in the IP Address field will attempt to do.         Name         EQX         VIPA	
	1	Name: Hardware Type: IP Address:	I       Image: Constraint of the second	
			< Back Next >	Cancel

Figure 3: Hardware Setup

- Click on the router, and then click on *Properties*. On the "Connections Settings" tab, ensure the Quartz Interface's port number, configured in the previous step, is entered for the Primary Port.
- On the "Control Settings" tab, ensure that *Input Name Source for Name Service* is set to "Yes". See Figure 4.



🗰 Properties: EQX		
Connection Settings		
Input Name Source for Name Service:		Yes
Default Source:		0
	Defaulte	Canad
	Deraults	Cancel

Figure 4: Control Settings

Complete the configuration of the MVP Server as usual, creating tie-lines between the Routers, and the Input modules, and between the input and output modules if applicable.



#### 5. USING NAMESERVICE IN MAESTRO

To use Nameservice for UMDs in Maestro, create the Layout on the *Interior Design View* and drag and drop a UMD Object on to the window. Click on the UMD, and set **Properties**  $\rightarrow$  **Mode Settings**  $\rightarrow$  **Mode**  $\rightarrow$  **Function to Name Service**.

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Audio Monitoring ×			IC2 (10.1.80.114)
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Figure 5: Nameservice in Maestro

#### 6. NAMESERVICE UMDS WITH PHYSICAL INPUTS

If the desired operation of the Multiviewer system is to have a router control panel directly route to the Multiviewer inputs, Nameservice can still be used for UMDs.

Instead of dragging and dropping a router source into a window in Maestro, drag a Physical input to the same window.

Physical inputs are the actual MVP/VIP inputs and will not cause a route on the upstream router. If the Physical inputs are not visible under *Ingest Sources*, ensure they are enabled by navigating to the *View* drop down menu, **View**  $\rightarrow$  **Arrange Sources By**  $\rightarrow$  **Physical Inputs** (Ensure this option is check marked).

Please note that each MVP system or VIPX module must use either Physical Inputs OR Router Inputs. To avoid unpredictable video routing to Multiviewer windows, the methods may not be mixed.



🎕 Maestro - [Untitled *]			
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Image: 200m to Fit     Shift+2       Under M     Clear     Ctrl+N       Full Screen     Refresh     F5       Umad     Arrange Sources By     Arrange Destinations By       Tool Windows     Grid Lines     Ctrl+Shift+G       Show Window Names     Ctrl+Shift+W	Device Address Device Name Device Type Hardware Configuration Source Name		Image: Constraint of the sector of the s
Status Console      Layers      Couble click a layer to activate it      Foreground      Background	Group Sources     Show Source Input     Show Virtual Index     All Inputs     Input Names Only     Physical Inputs		
Audio Monitoring ×			IC3 (I0.180.114)           3 PGM MCL / I PGM MCL (I 2 PGM MCL (I 3 PGM MCL (I FOXI ASS1 FOXI ASS FOXI ASS3 AFL SD TX           IC3 (I0.180.115)           FOX2 ASS1 FOX2 ASS2 FOX2 ASS3 JELINT A MK FOX3 ASS1 FOX3 ASS FOX3 ASS3 4FL SD MAIN           IC4 (10.180.116)
Status Console X		Use Virtual Names	17 64 170 17 736 51 Lindo 19/ Edl

**Figure 6: Enable Physical Inputs** 

#### 7. CONFIGURING NAMESERVICE IN EQX SERVER / MAGNUM

1. Configuration of the MAGNUM Quartz Interface begins with launching a Web Browser such as FireFox. Once the web browser has launched, enter the heartbeat address for the MAGNUM Cluster into the URL (For more information on this, please refer to the MAGNUM Server Manual).



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🔁 Login 🔅		-
EQX server		
Login		
You must provide your credentials before accessing this resource.		
Password: •••••		
Login		

Figure 7: Login Screen

2. After successful login, navigate to the **Interfaces** page and select the **Quartz** tab. (This configuration assumes a configured and functional control system of at least one router that the MVP Server will be connecting to for control/names.

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Interfaces		
Multi-Profile Single-Profile Symphony Quartz Profile Management		
🔾 Add 🛛 🖉 Edit 🛛 👕 Delete 🖓 Copy Profile		
SELECT: All, None, Modified SELECT	ED: 0 TO	TAL: 0
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No Quartz Ports Configured. Click the "Add" button to configure your Quartz Ports.	A2	в
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Done		*

#### Figure 8: Quartz Tab

3. To add a Quartz Interface, click the "Add" button.

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Interfaces							
Multi-Profile	Single-Profile	Symphony	Quartz	Profile Management			
💿 Add 🖉 Edit 🛙 🗊 Delete 📄 Copy Profile							
SELECT: All, None, Modifie	d						

Figure 9: Quartz Tab – "Add" Button



Add Quartz Interface	
* Name	
* Port	
* = required	<none></none>
	Add Done

Figure 10: "Add Quartz Interface" Dialog Box

- 4. When the dialog box appears prompting you to add a Quartz Interface, enter the appropriate information into the required fields:
  - Name: MULTIVIEWER
  - **Port:** 4050
- 5. Once the required fields have been filled in, click the "Add" button to finish creating the Quartz Interface.



Name Service Configuration

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Interfaces							
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SELECT: All, None, Modified	A			S	ELECTED: 0 T	OTAL: 1	
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Figure 11: Newly Added Quartz Interface Listed in Quartz Tab

- 6. Now that the Quartz Interface has been created and appears in the Quartz Interface list, click on the "pencil" icon to finish the configuration of the Quartz Interface.
- 7. Once the "pencil" icon has been clicked, the Quartz Interface will present the user with tabs containing source and destinations for the entire system as shown in Figure 12.



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	Unavailable	EQX	8	CAM-8	CAM-8	
	Unavailable	EQX	9	CAM-9	CAM-9	
	Unavailable	EQX	10	CAM-10	CAM-10	
	Unavailable	EQX	11	CAM-11	CAM-11	
	Unavailable	EQX	12	CAM-12	CAM-12	
	Unavailable	EQX	13	CAM-13	CAM-13	
	Unavailable	EQX	14	CAM-14	CAM-14	
	Unavailable	EQX	15	CAM-15	CAM-15	
	Unavailable	EQX	16	CAM-16	CAM-16	
	Unavailable	EQX	17	TDM TO EMR	TDM TO EMR	
	Unavailable	EQX	18	TDM TO EMR	TDM TO EMR	
	Unavailable	EQX	19	CAM-17	CAM-17	
	Unavailable	EQX	20	CAM-18	CAM-18	
	Unavailable	EQX	21	CAM-19	CAM-19	
	Unavailable	EQX	22	CAM-20	CAM-20	
	Unavailable	EQX	23	REM IN-1	REM IN-1	
	Unavailable	EQX	24	REM IN-2	REM IN-2	
	Unavailable	EQX	25	REM IN-3	REM IN-3	
	Unavailable	EQX	26	REM IN-4	REM IN-4	
	Unavailable	EQX	27	REM IN-5	REM IN-5	
	Unavailable	EQX	28	REM IN-6	REM IN-6	
	Unavailable	EQX	29	REM IN-7	REM IN-7	
	Unavailable	EQX	30	REM IN-8	REM IN-8	

#### Figure 12: Sources Tab

8. The default state of all sources and destinations for this Quartz Interface is unavailable. To make a source or destination available to the Quartz Interface, click on the source or destination.

### Application Note 20

Name Service Configuration

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5	Available	EQX	6	CAM-6	CAM-6	
	Unavailable	EQX	7	CAM-7	CAM-7	
6	Available	EQX	8	CAM-8	CAM-8	
	Unavailable	EQX	9	CAM-9	CAM-9	
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	Unavailable	EQX	14	CAM-14	CAM-14	
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	Unavailable	EQX	21	CAM-19	CAM-19	
	Unavailable	EQX	22	CAM-20	CAM-20	
	Unavailable	EQX	23	REM IN-1	REM IN-1	
	Unavailable	EQX	24	REM IN-2	REM IN-2	
	Unavailable	EQX	25	REM IN-3	REM IN-3	
	Unavailable	EQX	26	REM IN-4	REM IN-4	
	Unavailable	EQX	27	REM IN-5	REM IN-5	
	Unavailable	EQX	28	REM IN-6	REM IN-6	
	Unavailable	EQX	29	REM IN-7	REM IN-7	
	Unavailable	EQX	30	REM IN-8	REM IN-8	

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Figure 13: Making a Source/Destination Available

- 9. The source or destination will appear green (available) when clicked. To make a source or destination unavailable, hold down "ctrl" and click on the desired source or destination. Ensure that interface contains all sources and destinations for the device in the physical port order.
- 10. Now that sources and destinations have been assigned to the Quartz Interface they are ready to be used once they are uploaded and committed to the MAGNUM Server.

Note: Quartz is a numeric based protocol. This means that all sources and destination must have a numeric assignment, not alphanumeric assignments. The numeric assignment for the source and destinations within the Quartz port is derived from the "Order" column.



This means that the Quartz numeric assignment for EQX PORT 1 in Figure 14 is "1", and the numeric assignment for EQX PORT 8 is "6".

Interface Layout: Q1								
Sources Destinations								
Editing	Mode:	Availability	•					
SELECT:	All, Non	e						
Order		Availability	Device	Port <sup>▲</sup>	Global Name			
		<b>~</b>	EQX 💌					
1		Available	EQX	1	CAM-1			
2		Available	EQX	2	CAM-2			
3		Available	EQX	3	CAM-3			
4		Available	EQX	4	CAM-4			
		Unavailable	EQX	5	CAM-5			
5		Available	EQX	6	CAM-6			
		Unavailable	EQX	7	CAM-7			
6		Available	EQX	8	CAM-8			
		Unavailable	EQX	9	CAM-9			

Figure 14: "Order" Column

11. The Quartz numeric assignment can be changed by clicking on "Editing Mode" and selecting "Reorder". This allows the users to re-define the Quartz numeric assignments for a router port within the Quartz Interface.



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3 Available EOV 3 CAM-3 CAM-3								
4 Available Wove Below 4 CAM-4 CAM-4								
5 Available CAM-6 CAM-6								
6 Available EQX 8 CAM-8 CAM-8								

Figure 15: Re-arranging the Quartz Numeric Assignment

12. If specific Quartz assignments are required, the use of "Blanks" can be applied which insert place holders thereby forcing specific Quartz numeric assignments as shown in Figure 16.

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4	Available	EQX	4	CAM-4	CAM-4					
5	Available	BLANK								
6	Available	EQX	6	CAM-6	CAM-6					
7	Available	BLANK								
8	Available	EQX	8	CAM-8	CAM-8					
						*				

Figure 16: Creating "Blank" Sources & Destinations