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IBM i 7.1 BRMS Enterprise Enhancements

Introduction

This IBM® Redpaper[™] publication describes the configuration and use of the IBM i 7.1 Backup, Recovery, and Media Services (BRMS) Enterprise Enhancements. It focuses on the web-based IBM Navigator for i, which provides a comprehensive set of system management features for the IBM i system. The quantity of underlying BRMS features that are managed through BRMS Enterprise is extensive.

The scope of this Redpaper is limited to a general overview of the product. Also, it is important to note that only graphical access to this feature is available. No 5250 terminal character-based interface is offered for BRMS Enterprise.

Terminology

The following list includes a few new terms related to the BRMS Enterprise version:

Enterprise hub (or hub)

The *enterprise hub* is a central system that monitors BRMS backups for other BRMS systems called *enterprise nodes*.

Requirement: The enterprise hub must be IBM i operating system release 7.1 or later.

► Enterprise node (or node)

Enterprise nodes are BRMS systems that are monitored by an enterprise hub. Enterprise node properties are defined by and maintained on the hub. No enterprise-specific configuration is required on the nodes. However, for reports that are run on the node, remote writers must be configured. If the spooled files are being saved on the node, an output queue must be created.

 Each node has an associated *node policy*. The node policy defines properties that can be shared between multiple nodes. Each node can reference the node policy for any of its properties.

- Node groups enable an administrator to assign a name to a group of nodes. The node groups can be based on attributes the nodes have in common, such as owner, location, and time zone.
- Enterprise network

The nodes that are monitored by the hub are called an *enterprise network*.

The enterprise network can include BRMS stand-alone and BRMS networked systems. Communication is configured through each of the nodes in the enterprise network and is independent of traditional BRMS network configuration.

Enterprise report definition (or report definition)

Report definitions define how and when a report is generated for a node. The report definition can be run manually, or it can be scheduled to run at defined intervals.

The output that is created by running a report definition is stored in a user-designated output queue on the hub. The output can also be stored in a user-designated output queue on the node and emailed to the contacts for the node.

- Each report definition has an associated *report policy*. The policy defines properties that can be shared between multiple report definitions. Each report definition can reference the report policy for any of its properties.
- When a report definition is run for a node, a report is generated, which produces *report output*. Each report identifies when the report definition was run, what report output was produced, and where the report output was stored. Report output can include multiple files.
- Enterprise contact (or contact)

Contacts are users who are associated with the hub and nodes. The contacts get various notifications that include reports of errors that were encountered while generating reports.

The Start Recovery using BRMS (STRRCYRM), Start Maintenance for BRM (STRMNTBRM), Display Log for BRM (DSPLOGBRM), and Print Report using BRM (PRTRPTBRM) command reports have these characteristics:

- Manually run or scheduled
- Stored and viewed on the hub
- Optionally, stored on the node
- Email notifications for report errors
- Email reports

Also, the following items can be viewed from the central enterprise hub, rather than individually on each enterprise node:

- Status of backup control group processing
- Display and filter the BRMS log
- Connectivity status

Prerequisites

The hub and the nodes must all have current base licenses for IBM Backup, Recovery, and Media Services for i (5770BR1 *BASE for i 7.1, 5761BR1 *BASE for i 6.1, or 5769BR1 *BASE for i 5.4). The hub must also have current licenses for the BRMS - Network Feature (5770BR1 Option 1) and BRMS - Advanced Feature (5770BR1 Option 2) options.

The enterprise hub must be IBM i version 7.1 or later. The enterprise nodes can be running IBM i versions 7.1, 6.1, or 5.4.

The following PTFs must be applied to all the systems that will be part of the enterprise network:

- IBM i 7.1: SI50292
- ► IBM i 6.1: SI50291
- IBM i 5.4: SI50290

Tip: For 7.1 only, language-specific PTFs are applied for each secondary language on the system as a co-requisite.

All BRMS activity must stop while these PTFs are applied. In addition, users must sign off and on again before they use BRMS after the PTF is applied.

BRMS Enterprise is supported exclusively through the BRMS on IBM Navigator for i (web interface) or IBM System i® Navigator (GUI) release 7.1 and later.

Getting started

Before you start to use BRMS Enterprise, read this section, which describes the interface and its functions.

Accessing BRMS Enterprise through IBM Navigator for i

To access the BRMS Enterprise feature, complete these steps:

1. Ensure that the Admin HTTP server is running on the BRMS Enterprise hub system. If it is not started, issue the following command:

STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)

2. Open a Microsoft Internet Explorer or Mozilla Firefox browser window to this URL:

http://<yoursystem>:2001

3. Sign in with your IBM i user profile, as shown in Figure 1.

Note: If you have difficulty accessing the Admin web page on your IBM i system, before performing any troubleshooting or contacting the IBM i Global Support Center, first end and restart the ADMIN server. The command to end is **ENDTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)**. The command to start is listed in Step 1.

	igator for f	
	User ID:	
	lachmann	
for Business	Password:	
	•••••	
		Log in

Figure 1 IBM Navigator for i login

4. Expand the **IBM i Management** tree, select **Backup**, **Recovery and Media Services**, and click **Advanced**, as shown in Figure 2.



Figure 2 Locating the BRMS section in IBM Navigator for i

 Select the Enterprise Services option that is listed under the main BRMS welcome panel. The icon that is used is the main Backup, Recovery and Media Services for IBM i icon with an E superimposed over it, as shown in Figure 3.

Backup, Recovery, and Media S ost or damaged data. Using B	Services helps you implement a disciplined approach to r RMS, you can manage your most critical and complex ba	ianaging your backups, and provides you with an orderly way to recov :kups, including online backups of Lotus servers, simply and easily. \
an also recover your system fi	ully in the event of a disaster or hardware failure.	
# \$ \$ \$ I	Select Action 🔻	
List ^	Description ^	
Backup, Recovery, and Media Services for IBM i	Select actions such as displaying the global policy properties, restoring data, printing reports, and managing devices.	
Enterprise Services®	Manage BRMS systems through a BRMS Enterprise network.	
Archive Control Groups	Create, run, display and maintain archive control groups	
Backup Control Groups	Create, run, display and maintain backup control groups	
🚡 Media Policies 🖻	Display media policies information	
Move Policies	Display move policy information	
Jolumes	Display volume information	
🗐 <u>Media Pools</u> ®	Display media pool information	
Tasks	Tasks which are scheduled, executing, or have been completed	

Figure 3 Location of Enterprise Services in the BRMS section of the IBM Navigator for i

Adding nodes

To add nodes, complete these steps:

- 1. Select Enterprise Services.
- 2. The Hub Center window displays the nodes that are in the enterprise network, as shown in Figure 4. At first, the enterprise network does not contain any nodes. Click **Add**.

Backup, Rec	Select Action 🔻
Backup, Recove	y and Media Services
Enterprise Servio	
Hub Center	Enterprise nodes for hub APPN.ITSDP2:
Hub Administ	Add
Node Policie	Select_Node Release BRMS PTF BRMS Status Report Definitions Failed Reports Successful Reports Reports not Ran Description
Node Groups	None
Contacts	
Report Polici	

Figure 4 Adding a node

3. You can add nodes either individually or as a complete BRMS network, but your initial node must be added individually. Enter your network data and your DDM connection properties in the appropriate fields (Figure 5), and then click **OK**.

Communication	System name:	Use local system name 🔻 Go
Configuration		
Report definitions	Network identifier:	*NONE
	APPC name:	APPN
	TCP/IP name:	ITSOP2
	Relational database	ITSOP2
	DDM attributes:	
	Use node policy	: Unsecured Conn
	Secured connect	ction, use this user id and password:

Figure 5 Add Node dialog window

Tip: To find the current values for network attributes of a system, use the Display Network Attributes command, **DSPNETA**, in a 5250 session.

4. Your initial node is displayed as shown in Figure 6. The node's release, BRMS group PTF, and the connection status are listed.



Figure 6 Initial node information

5. After a node exists in the enterprise network, the systems that are in that node's BRMS network can be added to the enterprise network. Right-click the node and select **Add all systems in the BRMS network**, as shown in Figure 7.



Figure 7 Adding all BRMS networked systems

6. Click Yes to confirm the added systems in the confirmation window shown in Figure 8.

Backup,	, Recovery and Media Services
Enterpri	se Services
?	Do you want to add nodes for each system in APPN.ITSOP2's BRMS network?
	r Yes No

Figure 8 Add network confirmation

All of the BRMS systems that are networked with your initial node are automatically imported. At first, these systems show a BRMS status of "Not Connected." However, after the next BRMS network refresh, you will see a "Connected" status and other system details.

Node properties

To change node properties, click **Select Action**, and then select **Properties** for a node, as shown in Figure 9.

Backup, Rec ×	d Media Se	ervices					
terprise Services							
Hub Center	Enterprise	nodes for hu	b APPN.ITSOP2:				
Hub Administration	D	6 #	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		elect Action 🔻	Filter	
Node Policies	Select	Node	^ Release ^	BRMS PTF	BRMS Status ^	Report Definitions ^	Failed Reports ^
Node Groups		Appn.Itsop1	Bamaya		Connected	1	(
Contacts		Anna Itean?	Properties		Connected	1	
Report Policies		<u>Appn. isopz</u>	Refresh		Connected	•	
	Pag	e 1 of 1	View Reports		Rows 2	Total:	2 Filtered: 2
	L		Backup Status				
			Add all systems in the	BRMS network			
			Save Item as a Report				

Figure 9 Selecting the node properties

The Node Properties window is displayed as shown in Figure 10.

ackup, Rec ×			
ackup, Recovery and M	edia Services		
ode ITSOP1 Properties			
Communication	System name:	Use entry from below 👻 Go	
Configuration		ltsop1	
Report definitions	Network identifier:	Аррп	
Backup status	APPC name:	*None	
BRMS Log	TCP/IP name:	Itsop1	
	Relational database	Itsop1	
	DDM attributes:		
	Unsecured conn	nection w: Unsecured Connection	
	 Secured connect 	, . ction, use this user id and password:	
	User Id:		
	Password:		

Figure 10 Node Properties window

The information that is presented on each tab is contained within the Node Properties window. This configuration is especially important to be aware of when using the "Report definitions" tab from this Node Properties window. When you add or edit properties on the "Report definitions" tab, click **OK**, and then click **OK** again on the Node Properties window to save your changes.

Communications

On the Node Properties window, you use the Communications tab (Figure 10 on page 7) to specify how to establish a connection with the node. BRMS does not use this information to set up communication or create the necessary systems configuration. BRMS expects that the communication setup has been done by the user. The information on the Communications tab indicates to BRMS what to use to establish the remote connection.

Report definitions

The report definition properties, shown in Figure 11, indicate what and when reports should be run on a node.

e ITSOP1 Properties	
Communication	Report definitions
Configuration	Report definitions defined by node
Report definitions	
Backup status	
BRMS Log	Select Name A Description
	None
	Page 1 of 1 Go Rows 0 🔶 Total: 0 Filtered: 0
	Report definitions defined by node policy
	C
	Select Name ^ Description
	<u>Qreportdfn</u> Entry greated by BRM configuration
	Page 1 of 1

Figure 11 Report definitions

You can add new report definitions or edit existing definitions. Adding or changing report definition properties affects the next time that a report is scheduled to run.

You can specify the BRMS command to run for the report and the report frequency, as well as other runtime options, as shown in Figure 12.

Backup, Rec ×		
Backup, Recovery and I	Media Services	
Add report definition		
*Name:	Save System	
System name:	ITSOP1	
Network identifier:	APPN	
Description:	SAVSYS	
Report Policy:	QREPORTPCY - Go	
Command to run		
Command When to run	Recovery Report - STRRCYBRM.	
O Use report policy:	r: Weekly - Mon, Tue, Wed, Thu, Fri, Sat, Sun,	
Weekly	Sunday Monday Tuesday Wednesday	
	Thursday 🔲 Friday 🔽 Saturday	
Frequency in day	ys 0 0,1,2999	
Time to run		
🔘 Use report poli	licy: 10:00:00 AM	
Set time to run	in 1:45:00 PM Example: 12:30:00 PM	
Send notifications to	o contacts when errors occur running the command?	

Figure 12 Report definition properties

If you select **Weekly** in the "When to run" field, the report runs at the next scheduled day and time.

For a report definition using a when-to-run attribute of "Frequency in days," the report is run on the current day. If the scheduled time has passed, the report runs immediately. Otherwise, it runs at the scheduled time. The next run date is based on the current day and the frequency in days attribute.

Report policies

Although each report definition can have individual attributes on a node, you can use report policies to set default or group behavior for your report definitions. To get to your report policy, select **Report Policies** in the BRMS Enterprise main window, as shown in Figure 13.



Figure 13 Report policies

You can either modify existing policies or create new policies. The BRMS default report policy is Qreportpcy. When you create your own policies, you can select and set your command options by using these BRMS commands:

STRRCYBRM	Start Recovery using BRMS
STRMNTBRM	Start Maintenance for BRM
DSPLOGBRM	Display Log for BRM
PRTRPTBRM	Print Report using BRM

You can also set your scheduling options, notification options, and the number of reports to save, as shown in Figure 14.

Backup, Rec ×		
Backup, Recovery and	Media Services	
Add report policy		
*Name:		
Description:		
Command:	Recovery Report - STRRCYBRM.	
When to run		
Weekly	Sunday Thursday	
	Monday Friday	
	Tuesday Saturday	
	Wednesday	
Frequency in d	ays 0 0,1,2999	
Time to run: 2:02:	57 PM Example: 12:30:00 PM	
Send notification	to node contacts when errors occur running the command?	
Send report		
Number of reports to s	ave 1 0,1,299,999	
OK Cancel		

Figure 14 Report policy attributes

Contact information

On the Contacts tab, you can add and maintain contact information. Initially, there is no contact on the system. To add a contact, click **Add**, as shown in Figure 15.

Hub Administration Node Policies Select Contact ^ Last name ^ First name ^ Primary phone ^ Description	Add
Node Policies Select Contact A Last name A First name A Primary phone A Description	
	<u>^</u>
Node Groups	
Contacts	
Report Policies Page 1 of 1 1 Go Rows 1 🗸 Total: 1 Filtered: 1	· · ·

Figure 15 Adding a contact

For each contact, you can specify the information that is shown in Figure 16.

Backup, Rec X					
Backup, Recovery	and Media Services				
Add new contact					
*Contact:					
First name:					
Last name:					
Description:					
Primary phone:					
Secondary phone:					
Email address:					
OK Cancel					

Figure 16 New contact details

The email address that you enter is used for SMTP notifications. If you have any SMTP trouble, see "Email configuration" on page 18.

Hub administration

The hub system has options that can be set by using the Hub Administration panel shown in Figure 17, such as contacts and default behavior.

rprise Services	
Hub Center	Contact: Johnsmith 🔻
Hub Administration	Send notification to contact when errors occur running the command
Node Policies	
Node Groups	Ose Report Definition Ores One
Contacts	Send reports to contact ?
Report Policies	

Figure 17 Hub Administration panel

Monitoring nodes

The main purpose of the BRMS Enterprise feature is to monitor the BRMS backups for the IBM i systems in a network. The backups can be monitored by using these methods:

- Hub Center
- Backup status
- BRMS log
- Reports

Hub Center

The Hub Center is the main BRMS Enterprise panel. The Hub Center helps you manage nodes from a central location. You can use it to view, at a glance, the BRMS release, BRMS PTF level, the BRMS connection status, indications of BRMS network health, and a summary of report statuses, as shown in Figure 18. The displayed nodes can be subsetted by using the standard table filter on any of the columns that are displayed in the table.

Enterprise	nterprise nodes for hub APPN.ITSOP2:								
D		2	Se	elect Action 🔻	Filter				
Select	Node ^	Release ^	BRMS PTF ^	BRMS Status ^	Report Definitions ^	Failed Reports ^	Successful Reports ^	Reports not Ran ^	Description
	Appn.Itsop1	V7R1M0	SI47039	Connected	2	0	1	1	NONE
	Appn.Itsop2	V7R1M0	SI47039	Connected	1	0	1	0	*NONE
Pag	Page 1 of 1 1 G₀ Rows 2 ∽ Total: 2 Filtered: 2								

Figure 18 BRMS system health

The data in the Hub Center window reflects information collected the last time that a report definition was run on a node. To see the current node information, select **Refresh** on the node, as shown in Figure 19.

Note: In IBM i 7.1, an enhancement has been implemented that keeps the latest node system status up-to-date at the enterprise hub level. This results in a much faster refresh time than the previous need to query the node when a status update is requested.



Figure 19 Refreshing system status

The Report Definitions column shows the number of report definitions that exist for the node. The Failed Reports, Successful Reports, and Reports Not Run columns reflect the most recent report status for the report definitions that are defined for the node. These columns indicate whether the last run of the report definition was successful, failed, or has not been run. The number of Failed Reports, Successful Reports, and Reports Not Run should equal the number of report definitions.

Backup status

Backup control groups are run through BRMS to back up data on IBM i systems. It is important to monitor control group backups to verify that they run properly. The BRMS Enterprise feature provides a Backup Status window for each node, which you can use to monitor control group backups.

You can view the backup status for nodes in the enterprise network by selecting the **Backup Status** option on the menu for the node, as shown in Figure 20, or by clicking the **Backup Status** tab on the Node Properties window shown in Figure 10 on page 7.



Figure 20 Selecting Backup Status from drop-down menu

The Backup Status window can be set up to display the control group run status, start time, end time, elapsed time, job information, number of objects saved, and amount of data saved, as shown in Figure 21.

Backup, F	Recovery and Media	Services										
Appn.Itsc	p2 Backup Status											
	D ## #	1		Select Action 🔻	Filter							
Select	Control Group ^	Type ^	Status ^	Start Time ^	End Time ^	Duration ^	Job Name ^	Job User ^	Job Number ^	Save Size ^	Objects Saved ^	Objects Not Saved ^
	Ifstest 💌	Backup	Unsuccessful saves	Sep 25, 2012 11:14:06 AM	Sep 25, 2012 12:08:47 PM	00:54:41	FOXNOTE15B	LACHMANN	88525	22042.0	149527	44
	Ifstest	Backup	Unsuccessful saves	Sep 25, 2012 10:15:17 AM	Sep 25, 2012 11:10:18 AM	00:55:01	FOXNOTE15B	LACHMANN	88525	22042.0	149527	44
	Testlib	Backup	Successful saves	Sep 25, 2012 09:38:04 AM	Sep 25, 2012 09:36:06 AM	00:00:02	FOXNOTE15B	LACHMANN	88525	22.0	87	0
	Testlib	Backup	Successful saves	Sep 25, 2012 09:35:01 AM	Sep 25, 2012 09:35:03 AM	00:00:02	FOXNOTE15B	LACHMANN	88525	22.0	87	o
	Testlib	Backup	Successful saves	Sep 25, 2012 09:32:28 AM	Sep 25, 2012 09:32:37 AM	00:00:09	FOXNOTE15B	LACHMANN	88525	22.0	87	o
Pa	ige 1 of 1	1	Go	Rows 5		Total: 5 Fil	tered: 5					

Figure 21 Backup status display

BRMS log

All BRMS activity can be monitored through the BRMS log. Filters can be used to subset the messages in the log. View the BRMS log for nodes in the enterprise network by selecting **BRMS Log** in the menu for the node, as shown in Figure 22. You can also click the **BRMS Log** tab on the Node Properties window as shown in Figure 10 on page 7.



Figure 22 BRMS log access

You can use the BRMS log preselection window to preselect log entries as you would with the Display Log for BRMS command, **DSPLOGBRM**. The BRMS Log display gives you access to your usual BRMS messages, as shown in Figure 23.

BRMS Log	- APPN.ITSOP2									
Refresh List items:]								8	
	C C 2 2 - Select Action *									
Select	Message ID ^	Severity 3	Entry Type ^	Message	Date Sent 1	Time Sent 2	User ^	Job Name ^	Job Number ^	Control Group
		o	Enterprise	REPORT QREPORTDI GENERATED FOR NODE APPN.ITSOF	Oct 10, 2012	10:00:34 AM	Qbrms	Q1azgenrpt	089845	*None
		0	Enterprise	REPORT QREPORTO GENERATED FOR NODE APPN.ITSOF	Oct 10, 2012	10:00:31 AM	Qbrms	Q1azgenrpt	089844	*None
		0	Enterprise	REPORT QREPORTO GENERATED FOR NODE APPN.ITSOF	Oct 9, 2012	10:00:15 AM	Qbrms	Q1azgenrpt	089782	*None
	@ <u>BRM8011</u> @	0	Enterprise	REPORT QREPORTO GENERATED FOR NODE APPN.ITSOF	Oct 9, 2012	10:00:12 AM	Qbrms	Q1azgenrpt	089781	*None

Figure 23 BRMS log display

Report definitions

The majority of reports within BRMS are created by using the following commands:

STRRCYBRM	Start recovery using BRM
STRMNTBRM	Start maintenance for BRM
DSPLOGBRM	Display log for BRM
PRTRPTBRM	Print report using BRM

These commands can also be run and managed by using BRMS Enterprise. The reports are defined by using report definitions. The report definitions can be run manually by selecting **Run report** on the Report Definition menu. You can also schedule them to run at intervals by selecting **Properties** on that menu.

To work with existing report definitions or to create new ones, right-click the node in the Hub Center, select **Node Properties**, and then click **Report Definitions** in the Node Properties window, as shown in Figure 24.

You can either add your own report definitions here or modify existing definitions.

Node ITSOP2 Properties		
Communication	Report definitions	
Configuration	Report definitions defined by node	
Report definitions		dd
Backup status		
BRMS Log	Select Name A Description A	
	None	
	Page 1 of 1 1 Go Rows 0 \bigtriangledown Total: 0 Filtered: 0	
	Report definitions defined by node policy	
	Image: Select Action T Filter	
	Select Name ^ Description ^	
	Creportdfn Entry created by BRM configuration	
	Page 1 of 1 1 Go Rows 1 🔶 Total: 1 Filtered: 1	

Figure 24 Report definitions

Reports

When report definitions are run, reports are generated. Reports contain information that identifies how, where, and when a report definition was run. Reports also identify what report output was generated.

All reports for a node can be viewed by right-clicking the node and selecting **View Reports**, as shown in Figure 25 on page 17.

Hub Center	Enterprise	nodes for hu	Ib APPN.I	TSOP2:		
Hub Administration		6 4	± ±₽	1		ele
Node Policies	Select	Node	^	Release ^	BRMS PTF ^	
Node Groups		Anna literation	- INI	V704M0	6147030	
Contacts		Appnitsop		VIRTINO	3147035	-
Report Policies		Appn.Itsop2	Remov	/e		C
	Pag	e 1 of 1	Proper Refrest	rties 1		
		-	Miew R	leports		
			Backup	Status		
			BRMS	Log		
			Add al	I systems in the I	BRMS network.	
			Save It	tem as a Report.		

Figure 25 Selecting the View Reports option

A list of all reports that are available on the node that you selected is displayed. To see the reports for a specific time stamp, select the report as shown in Figure 26.

Ø		Select Action 🔻	· Filte	er		
elect	Report Timestamp ^	Output Queue System Name ^	Command ^	Report Definition ^	Node Policy ^	Total
	Oct 10, 2012 10:00:24 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	<u>Oct 9, 2012 10:00:05 AM</u>	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	Oct 8, 2012 10:00:35 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	Oct 7, 2012 10:01:03 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	Oct 6, 2012 10:00:34 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	Oct 5, 2012 10:01:04 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	Oct 4, 2012 10:00:30 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	Oct 3, 2012 10:00:06 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	Oct 2, 2012 10:00:41 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	<u>Oct 1, 2012 10:00:20 AM</u>	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	Sep 28, 2012 10:00:16 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3
	Sep 27, 2012 10:00:59 AM	APPN.ITSOP2	STRRCYBRM	Qreportdfn	QNODEPCY	3

Figure 26 Selecting a time frame

You can also select a report to download as a PDF file.

To view the reports for a specific report definition, right-click the report definition and select **View reports**.

Report output

When report definitions are run, they produce reports. The reports identify the report output that was generated. The report output can be viewed by right-clicking the report and selecting the **View Report** option, as shown in Figure 27.

Report outp	ut for report	definition 'Qreportdfn' a
Ealact		
Select	Report ^	Report Timestamp
	QP1AASP 🖻	Oct 2, 2012 10:00:11 AM
	QP1ARCY	/iew Report
	QP1A2RC	Save Item as a Report
Page	≘ 1 of 1	1 Go
OK Can	cel	

Figure 27 View report

BRMS Enterprise special considerations

Keep these tips in mind when you are working with the BRMS Enterprise feature.

Remote output queues and writers on nodes

The spooled files that are generated for a report on a node are stored in a remote output queue. The spooled files are then copied or moved to the hub by using a remote writer. The remote writer requires that a TCP/IP interface is configured in the operating system, an IP address on the printer side, and a line printer daemon (LPD) TCP/IP process running on the print server.

For more information about configuration for remote output queues and remote writers, see the IBM Technote titled *Configuring a RMTOUTQ to Send SPLFs from One IBM System i to Another Using LPR/LPD:*

http://www.ibm.com/support/docview.wss?uid=nas1c7b1e076e7740a9c86256ab90057b4fd

Email configuration

Email addresses can be specified for enterprise contacts. The contacts can be used to indicate where to send email for BRMS Enterprise functions. For example, reports or report error notifications can be sent to the contacts for a node.

BRMS uses TCP/IP SMTP to send email, you must configure SMTP for Enterprise email functions to work properly. For more information about SMTP configuration, see "Simple Mail Transfer Protocol on IBM i5/OS[™]" in the IBM i 7.1 section of the IBM Knowledge Center:

http://ibm.co/1smh6ax

TCP/IP SMTP needs a system directory entry for a user to send email. Because scheduled report definitions run in a BRMS job under user QBRMS, BRMS automatically adds a directory entry for QBRMS if one does not exist. If a report definition is run manually by clicking **Run report**, the user running the report must have a directory entry defined to successfully work with SMTP. For more information, see the Work with Directory Entries (**WRKDIRE**) command.

Run the following command to check whether SMTP is working correctly:

SNDDST TYPE(*LMSG) TOINTNET((memyself@my.company.com)) DSTD('SMTP test')
LONGMSG('SMTP test')

Time zone considerations

The dates and times that are used for scheduled activities that are initiated through the hub, such as report definition run times, are relative to the hub. For example, if the hub is in the Central Standard Time (CST) time zone and has a report definition run time that is defined as 06:00, the report definition runs on the node at 06:00AM CST, regardless of the time zone of the node.

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This paper was produced by a team of specialists from around the world working at the IBM International Technical Support Organization, Rochester Center.

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