

IBM Platform Symphony 5.1 enhance resource plan managing tool Readme File

About enhancing the resource plan managing tool

This package enhances the RFC4132/4497 feature. The enhancement includes the following:

1. Allow Consumer administrator to click the "Simulate" button and get the real "In Slots" values at the branch level the Consumer administrator belongs to.
2. The basevalue is read-only for Consumer administrator.
3. The basevalue checksum checking will still be done, for the child consumer branches under that Consumer administrator.

Readme file for: IBM® Platform Symphony

Product/Component Release: 5.1

Update Name: Fix pack

Fix ID: sym-5.1-248308-sg

Publication date: 9 January 2015

Last modified date: 9 January 2015

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1. Scope

Applicability	
Operating system	Windows 2003 R2 Enterprise x64 SP2, Windows 2008 R2 64 bits
Symphony version	5.1
Cluster types	This feature applies to a single Platform Symphony cluster
Dependencies	
File system	N/A
<Other>	This feature will work when the following parameter is added to %EGO_CONFDIR%\..\..\gui\conf\pmcconf\pmc_conf_ego.xml: <Parameter> <Name>EnhancedResourcePlanner</Name> <Value>yes</Value> </Parameter>
Limitations	
<Limitation>	1. This feature is for the pure share policy. 2. Lend/Borrow/Hybrid share policies are not supported.
Known Issues	N/A

2. Configuration to enable the enhanced feature

1) Prerequisites

1. Cluster Symphony 5.1 is installed.
2. The patch package ego1.2.5_win-x64-227070.msp and ego1.2.5_win-x64-231498.msp are installed.

2) Installation files

The ego1.2.5_win-x64-248308.msp package includes the following files:

File name	Description
<pre> \$EGO_TOP\1.2.5\lib\libvem.dll \$EGO_TOP\1.2.5\lib\libvem.dll \$EGO_TOP\1.2.5\lib\libvem.pdb \$EGO_TOP\1.2.5\etc\vemkd.exe \$EGO_TOP\1.2.5\etc\vemkd.pdb \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\com\platform\vem\gui\api\ConsumerResourcePlanManager\$1.class \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\com\platform\vem\gui\api\ConsumerResourcePlanManager.class \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\com\platform\vem\gui\web\consumer\ResourcePlanIOAction.class \$EGO_TOP\gui\ego\1.2.5\platform\js\ResourcePlanDom.js \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\com\platform\vem\gui\api\ConsumerResourcePlanUtil.class \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\com\platform\vem\gui\web\consumer\ImportResourceCsvFileAction.class \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\com\platform\vem\gui\web\consumer\ImportResourceXmlFileAction.class \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\com\platform\vem\gui\web\ApplicationResources.properties \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\org\apache\jsp\consumerManage\importResourceXml_jsp.class \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\org\apache\jsp\consumerManage\importResourceXml_jsp\$importResourceXml_jspHelper.class \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\src\org\apache\jsp\consumerManage\importResourceXml_jsp.java \$EGO_TOP\gui\ego\1.2.5\platform\consumerManage\importResourceXml.jsp \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\org\apache\jsp\consumerManage\importResourceCSV_jsp.class \$EGO_TOP\gui\ego\1.2.5\platform\WEB-INF\classes\org\apache\jsp\consumerManage\importResourceCSV_jsp\$importResourceCSV_jspHelper.class \$EGO_TOP\gui\ego\1.2.5\platform\WEB- </pre>	<p>The binary files that contain the enhanced feature for Windows x64.</p>

File name	Description
INF\src\org\apache\jsp\consumerManage\importResourceCSV_jsp.java \$EGO_TOP\gui\ego\1.2.5\platform\consumerManage\importResourceCSV.jsp	
checksum.md5	The file that contains the MD5 checksum ego1.2.5_win-x64-248308.msp

3) Installation procedure

a. Before installation

Shut down the cluster using the following commands:

```
> soamcontrol app disable all -f
> egosh service stop all
> egosh ego shutdown all
```

b. Installation steps

1. Download the `ego1.2.5_win-x64-248308.msp` file to each master host and candidate host.
2. Clean up the GUI work directory and the browser cache.
Delete all subdirectories and files in this directory: `%EGO_TOP%\gui\work*`
3. Double-click the MSP package to run the installer.

c. After installation

Start the cluster using the following command:

```
> egosh ego start all
```

4) Configuration procedure

Enable the feature RFC4132/4497 by adding the following parameter to `%EGO_CONFDIR%\..\gui\conf\pmcconf\pmc_conf_ego.xml`

```
<Parameter>
  <Name>EnhancedResourcePlanner</Name>
  <Value>yes</Value>
</Parameter>
```

5) Verification procedure

1. Run `vemkd` as follows:

```
> %EGO_TOP%\1.2.5\etc\vemkd.exe -V
```

The following is an example output of running this command:

Platform EGO 1.2.5.248308, Dec 24 2014
Copyright Platform Computing Inc., an IBM company, 1996-2009, 2012.

binary type: win2003-x64
notes:

3. Usage

1) Assumptions & Dependencies

1. Customer is using number of slots as share ratio in their environment.
2. Customer is using Firefox to launch the WEBGUI page. Due to IE performance issues, the assumption is that the customer does not use the IE browser any more.
3. Customer is using a pure share policy without using ownership/borrow/lend/hybrid policy.
4. Customer does not use CLI to manually remove parent Consumer Admin from children's level, so a parent Consumer Admin will be the Consumer Admin for all its descendants.

2) How the feature works

Configure a parameter in %EGO_CONFDIR%\..\..\gui\conf\pmcconf\pmc_conf_ego.xml file to enable/disable the RFC4132/4497 feature. If the value for EnhancedResourcePlanner is set to yes (case insensitive), this RFC feature is enabled. Restart the WEBGUI service to make the change take effect.

Clear the browser cache when user logs on WebGUI.

```
<ParamConfs>
...
  <Configuration>
    ...
    <Parameter>
      <Name>EnhancedResourcePlanner</Name>
      <Value>yes</Value>
    </Parameter>
  </Configuration>
</ParamConfs>
```

3) Examples

Case 1: In slots value calculation

Summary

Check the "In Slots" value calculation.

Pre-Conditions

1. Enable the parameter and log on GUI with Cluster and Consumer administrator.
2. Fill in the share ratio values.

Scenario

1. Cluster administrator logs on GUI and creates a consumer tree and fills in the "Ratio" values, as shown below.

cluster1

- SymTesting
 - Symping51
 - test1
 - test11
 - test12
 - test
 - ClusterServices
 - SymphonyClusterService
 - EGOClusterServices
 - SymExec
 - SymExec51
 - SampleApplications
 - EclipseSamples
 - SOASamples
 - ManagementServices
 - SymphonyManagement
 - EGOManagementService

Field filter

Owned Rank Lend Borrow Ratio Limit

Consumer	00:00 04:00						04:00 24:00							
	Ownership Model			Sharing Model			Ownership Model			Sharing Model				
	Owned	Rank	Lend	Borrow	Ratio	(In Slots)	Limit	Owned	Rank	Lend	Borrow	Ratio	(In Slots)	Limit
cluster1	100							100						
SymTesting	0	0			200	()		0	0			100	()	
Symping51	0	0			400	()		0	0			400	()	
test1	0	0			1000	()		0	0			1000	()	
test11	0	0			400	()		0	0			500	()	
test12	0	0			600	()		0	0			500	()	
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
test	0	0			600	()		0	0			600	()	
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
SampleApplications	0	0			300	()		0	0			400	()	
SOASamples	0	0			200	()		0	0			200	()	
EclipseSamples	0	50			800	()		0	50			800	()	
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
SymExec	0	0			500	()		0	0			500	()	
SymExec51	0	0			1000	()		0	0			1000	()	

2. Cluster administrator clicks “Simulate”. The resource plan will be updated.

cluster1

- SymTesting
 - Symping51
 - test1
 - test11
 - test12
 - test
 - ClusterServices
 - SymphonyClusterService
 - EGOClusterServices
 - SymExec
 - SymExec51
 - SampleApplications
 - EclipseSamples
 - SOASamples
 - ManagementServices
 - SymphonyManagement
 - EGOManagementService

Slot allocation policy

For each allocation:

- Stacked: use free slots from a single host before allocating slots from another host.
- Balanced: use free slots from the host with the highest number of free slots.
- Exclusive: use all free slots from a host. Each host only assigned to one allocation.

Share policy Base value 1000

Hybrid policy

Field filter

Owned Rank Lend Borrow Ratio Limit

Consumer	00:00 04:00						04:00 24:00							
	Ownership Model			Sharing Model			Ownership Model			Sharing Model				
	Owned	Rank	Lend	Borrow	Ratio	(In Slots)	Limit	Owned	Rank	Lend	Borrow	Ratio	(In Slots)	Limit
cluster1	100							100						
SymTesting	0	0			200	(20)		0	0			100	(10)	
Symping51	0	0			400	(8)		0	0			400	(4)	
test1	0	0			1000	(8)		0	0			1000	(4)	
test11	0	0			400	(4)		0	0			500	(2)	
test12	0	0			600	(4)		0	0			500	(2)	
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
test	0	0			600	(12)		0	0			600	(6)	
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
SampleApplications	0	0			300	(30)		0	0			400	(40)	
SOASamples	0	0			200	(6)		0	0			200	(8)	
EclipseSamples	0	50			800	(24)		0	50			800	(32)	
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
SymExec	0	0			500	(50)		0	0			500	(50)	
SymExec51	0	0			1000	(50)		0	0			1000	(50)	

3. Consumer administrator logs on GUI and fill in the “Ratio” values, as shown below.

cluster1

- SymTesting
 - Syming51
 - test

Expand All
Collapse All

SymTesting

Consumers Resource Plan Consumer Properties

Resource Group: ComputeHosts Time Intervals and Settings

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Hybrid policy

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	Owned	Rank	Lend	Borrow	Ratio	(In Slots)	Limit	Owned	Rank	Lend	Borrow	Ratio	(In Slots)	Limit
cluster1														
SymTesting	0	0			200	()		0	0			100	()	
Syming51	0	0			400	()		0	0			400	()	
test1	0	0			1000	()		0	0			1000	()	
test11	0	0			400	()		0	0			500	()	
test12	0	0			600	()		0	0			500	()	
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
test	0	0			600	()		0	0			600	()	
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-

4. Consumer administrator clicks "Simulate". The resource plan will be updated.

cluster1

- SymTesting
 - Syming51
 - test1
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Collapse All

SymTesting

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Share policy Base value 1000

Hybrid policy

Field filter

Owned Rank Lend Borrow Ratio Limit

Consumer	00:00 04:00							04:00 24:00						
	Owned	Rank	Lend	Borrow	Ratio	(In Slots)	Limit	Owned	Rank	Lend	Borrow	Ratio	(In Slots)	Limit
cluster1														
SymTesting	0	0			200	(20)		0	0			100	(10)	
Syming51	0	0			400	(8)		0	0			400	(4)	
test1	0	0			1000	(8)		0	0			1000	(4)	
test11	0	0			400	(4)		0	0			500	(2)	
test12	0	0			600	(4)		0	0			500	(2)	
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Total	0	-	-	-	-	-	-	0	-	-	-	-	-	-
Balance	0	-	-	-	-	-	-	0	-	-	-	-	-	-
test	0	0			600	(12)		0	0			600	(6)	

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