



Template Configuration Tool

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SAP NetWeaver™ RIG



Introduction

Template Configuration Tool Details

Apply a Configuration Template

Helpful Resources

Questions and Answers



Introduction

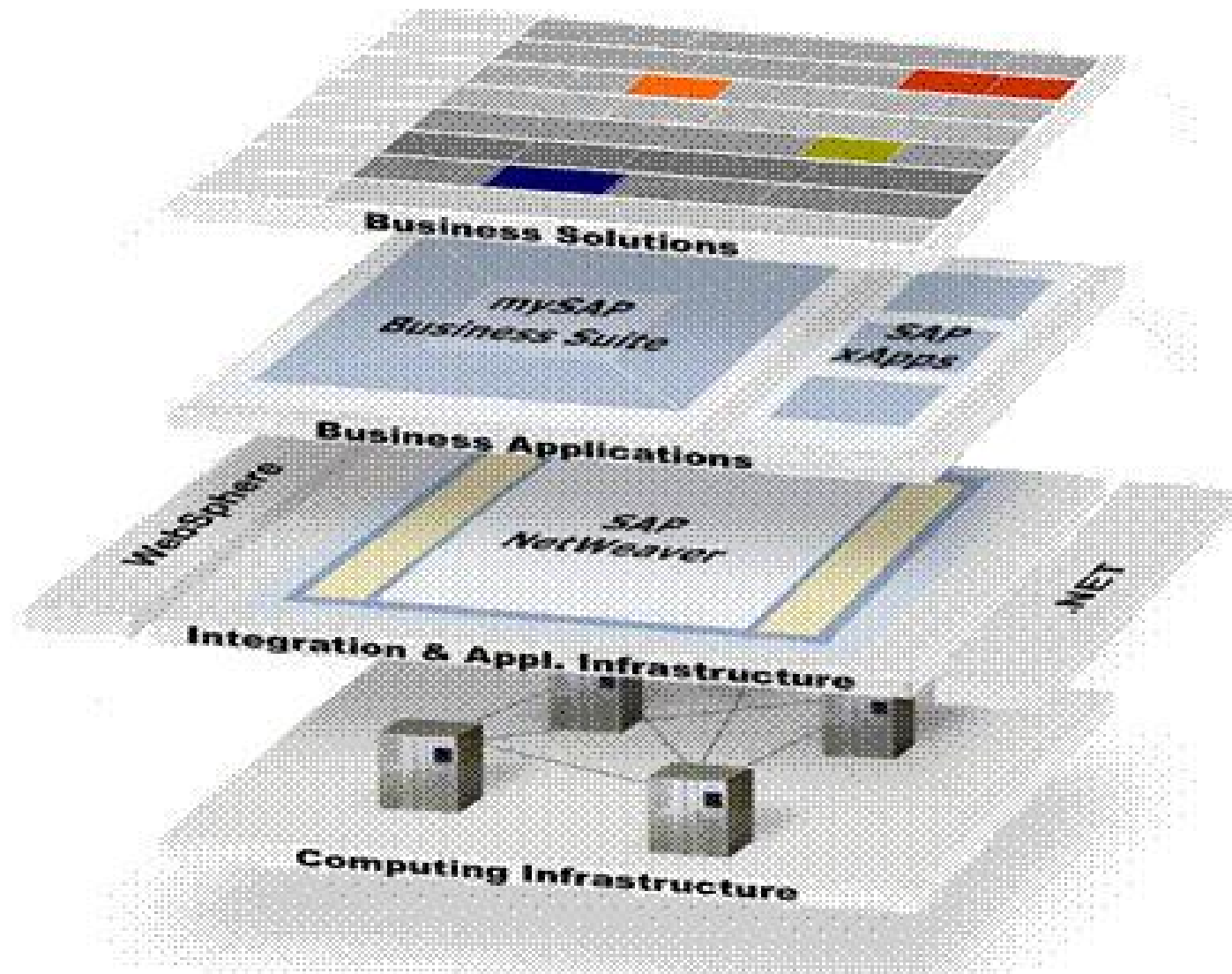
Template Configuration Tool Details

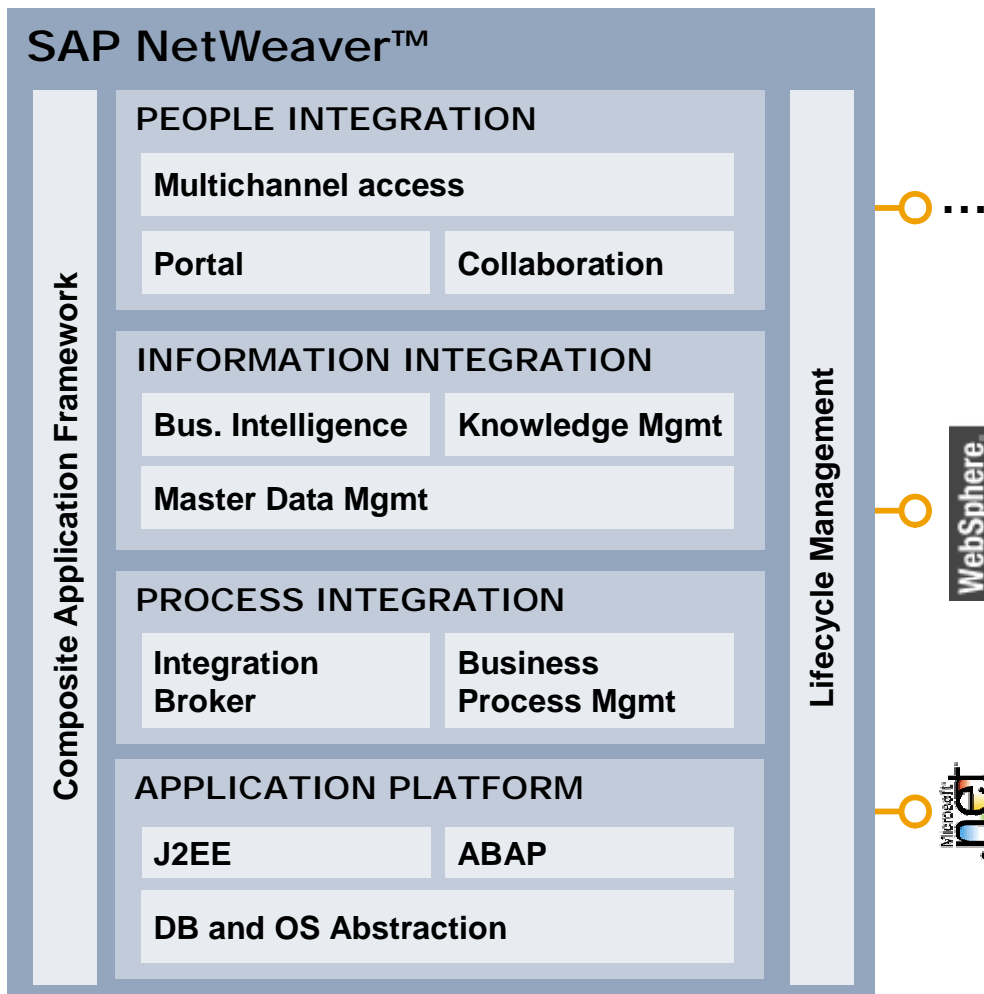
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Helpful Resources

Questions and Answers

SAP NetWeaver in the I.T. Constellation





Deliver Superior business value

- n Prepackaged business content
- n Reduces complexity

Open, flexible architecture

- n Service oriented architecture
- n Open standards-based

Reduce TCO of the entire IT landscape

- n Leverage existing investments
- n One integrated platform
- n Best Integration with SAP

Enterprise Services Architecture (ESA)

Enterprise Services Architecture

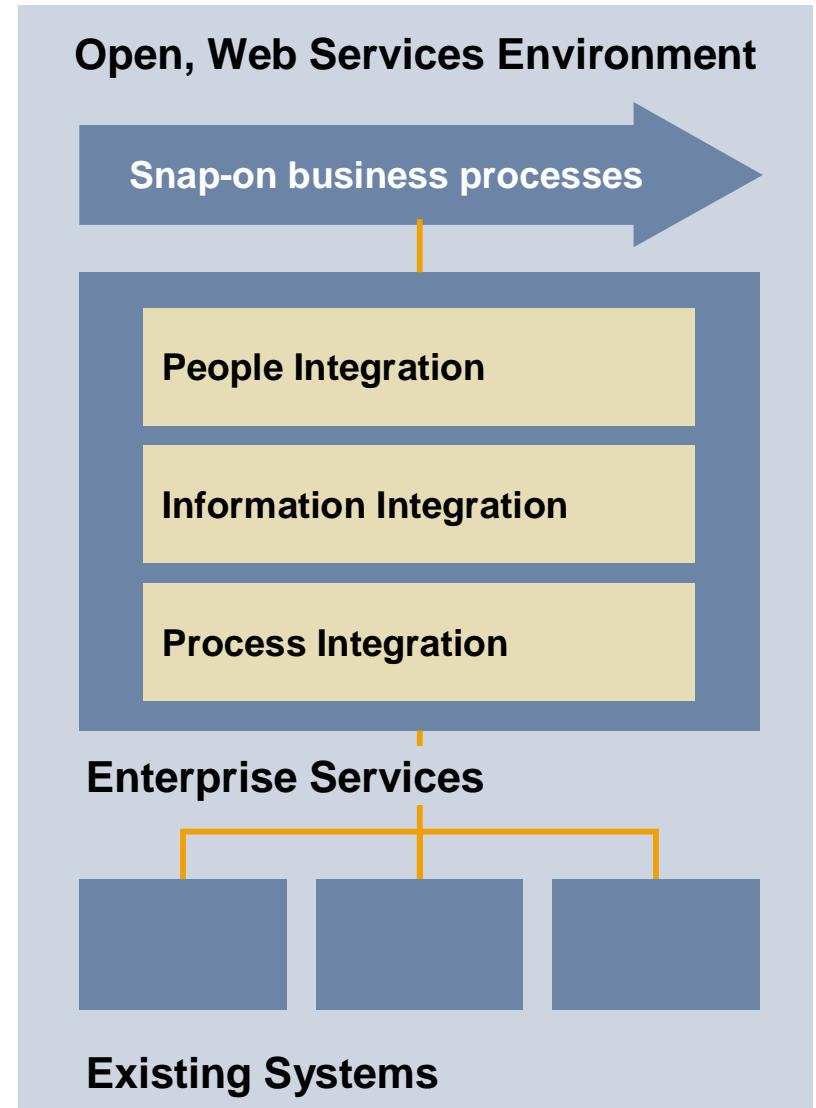
- n ESA is a **blueprint** for services-based and enterprise-scale business solutions

SAP NetWeaver

- n Technical **enabler** for these solutions, based on ESA

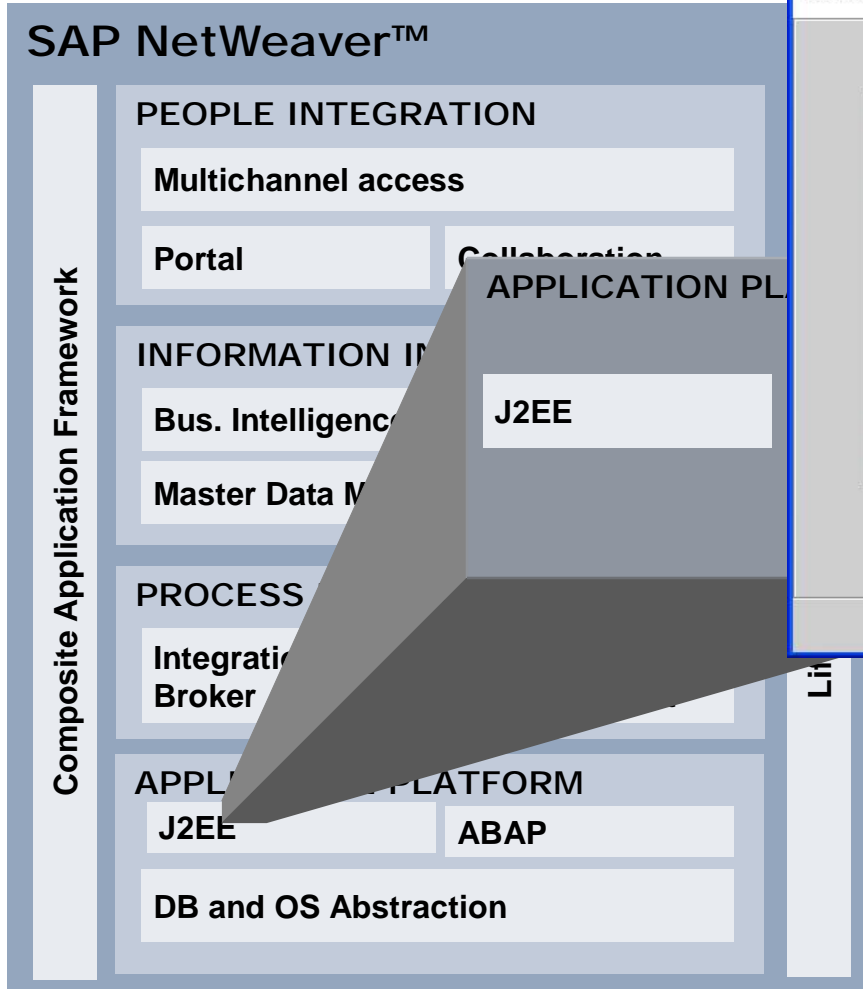
SAP Web Application Server

- n Technical **Web Service-based** platform for all SAP NetWeaver components



SAP NetWeaver™

THE BEST TECHNOLOGY PLATFORM TO ALIGN I.T. WITH THE BUSINESS



Reduce TCO of the entire IT landscape

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Apply a Configuration Template

Helpful Resources

Questions and Answers

What is the Template Configuration Tool?

nA tool provided by the SAP NetWeaver Web AS 6.40 Java installation; no additional installation required.

nA tool that, when used, provides the correct and optimized J2EE settings for a particular Web AS 6.40 and SAP NetWeaver component implementation.

Benefits of Using the Template Configuration Tool

nHigher availability of SAP NetWeaver component through elimination of common J2EE application resource shortages caused by incorrect and inadequate settings.

n Memory, threads, db connections, etc.

n Hardware architecture, O/S and java virtual machine constraints observed

nOptimal performance of SAP NetWeaver components due to correct resources available to components

n Presumes enough resources are available, of course; e.g. system is sized correctly for actual load.

nUniform and “automatic” settings across all J2EE instances in system reducing failures due to accidental and erroneous settings made manually, e.g. parameter with incompatible value, typing errors, etc.

nReduced TCO by reduced administrator time spent determining and manipulating parameters and values, applying the parameters, testing the parameters and documenting.

Usage Constraints for Template Configuration Tool

n Use the tool only for NEW installations of Web AS 6.40 Java (and Java Add-In (to ABAP)) SP7 and above

n SP7 = SAP NetWeaver '04 Support Package Stack 04

n This means do not apply the tool to an environment that was installed below SP7 and upgraded to any support package

n Do not use the tool for SAP NetWeaver Developer Workplace installation; won't harm but is not necessary

n SAP EP systems must have at least 2GB memory on the system to use the tool

n SAP NetWeaver Adobe Document Server (ADS) and SAP System Landscape Directory (SLD) have special requirements.

n Usage does not prevent manual settings from being made however manual settings outside of tool reduce benefits of using the tool.

n See SAP Note # 739788 *SAP NetWeaver: Template-Based Configuration – Composite Note* for updates, workarounds and limitations.

n Do not manipulate USAGE_FACTOR as described at <http://help.sap.com> (SAP Library) unless SAP Note 739788 removes restriction.

Usage Constraints for Template Configuration Tool (II)

Platforms currently supported (check SAP Note 739788 for updates):

Windows NT

Windows NT on Itanium (64 Bit)

Linux

Solaris

HP-UX (PA-RISC)

HP on Itanium (64 Bit)

IBM AIX

Tru64 (except templates for the portal scenario)

Template Configuration Tool: File System Structure

The screenshot displays the Windows Explorer interface for the Template Configuration Tool. The address bar shows the path `C:\usr\sap\AJB\SYS\global\TemplateConfig`. The left pane shows the folder tree, and the right pane shows a list of files and folders. Annotations highlight key components:

- Trace and logs:** Points to `system.log` and `cfgtemplate.trace`.
- TCT java archives:** Points to the `lib` folder.
- Start scripts:** Points to the `working` folder.

Name	Date Modified
system.log	2/9/2005 2:29 PM
cfgtemplate.trace	2/9/2005 2:29 PM
cfgtemplate.log	2/9/2005 2:29 PM
BatchConfig.log	2/9/2005 2:03 PM
jefftestj2ee-only.xml	1/25/2005 3:44 PM
cfgtemplategui.sh	12/23/2004 1:18 AM
cfgtemplategui.bat	12/23/2004 1:18 AM
working	2/9/2005 2:02 PM
templates	1/24/2005 9:00 AM
lib	1/24/2005 9:00 AM

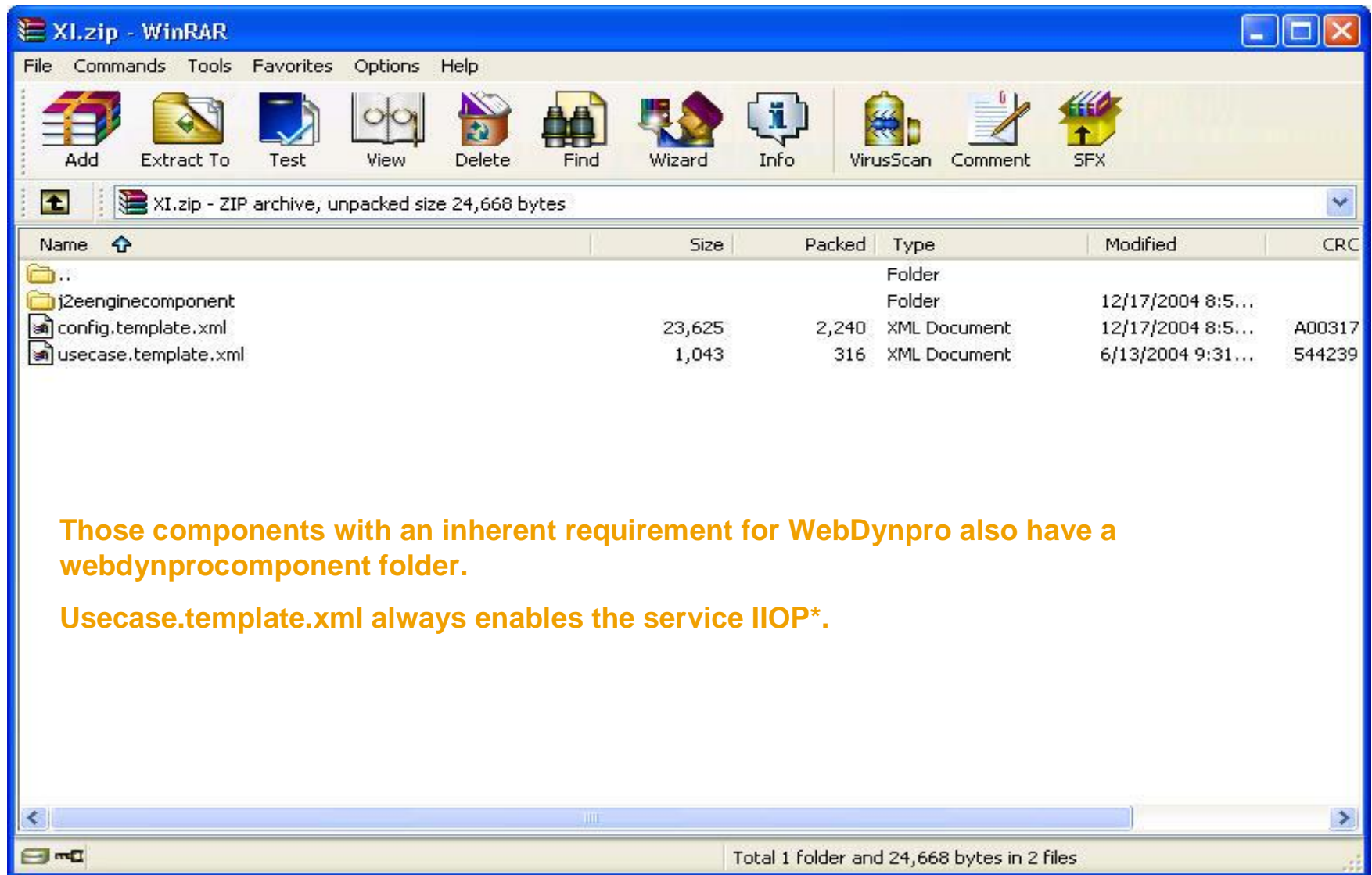
Available Templates

Name	Size	Type	Date Modified
BW.zip	5 KB	WinRAR ZIP archive	12/23/2004 1:18 AM
J2EE-Engine-only.zip	3 KB	WinRAR ZIP archive	12/23/2004 1:18 AM
JDI-DTR-and-CBS.zip	5 KB	WinRAR ZIP archive	12/23/2004 1:18 AM
JDI-DTR-only.zip	5 KB	WinRAR ZIP archive	12/23/2004 1:18 AM
Portal.zip	3 KB	WinRAR ZIP archive	12/23/2004 1:18 AM
XI.zip	3 KB	WinRAR ZIP archive	12/23/2004 1:18 AM
XI-dev.zip	3 KB	WinRAR ZIP archive	12/23/2004 1:18 AM
XI-with-DTR.zip	5 KB	WinRAR ZIP archive	12/23/2004 1:18 AM

Current SP Stack may have new templates downloadable from SAP Note 739788. Always check when upgrading.

If SAP EP on a single-cpu machine download and use the Portal_1CPU.zip template from SAP Note 739788

Inside the Template Zip File



Inside the config.template.xml

```
- <platform name="ntintel" bit.length="32">
  <property key="server.additional.parameters" value="-Djco.jar.m=1 -XX:MaxPermSize=192M -XX:PermSize=192M -
<!-- System Threads dispatcher node -->
<!-- Dispatcher threads depend on the number of Application Threads on the server nodes. -->
- <task name="change.manager.properties">
  <property key="element.name" value="$DISPATCHER$" />
  <property key="prop.MinThreadCount.custom" value="30" /> />
  <property key="prop.InitialThreadCount.custom" value="EXPR[30 + ${NUMBER_SERVER_NODES}*10]" />
  <property key="prop.MaxThreadCount.custom" value="EXPR[30 + ${NUMBER_SERVER_NODES}*40]" />
  <property key="manager.name" value="ThreadManager" />
</task>
<!-- Application Threads server node : this needs to be customized per application -->
- <task name="change.manager.properties">
  <property key="element.name" value="$SERVER$" />
  <property key="prop.MinThreadCount.custom" value="40" />
  <property key="prop.InitialThreadCount.custom" value="40" />
  <property key="prop.MaxThreadCount.custom" value="150" />
  <property key="manager.name" value="ApplicationThreadManager" /> />
</task>
- <task name="change.manager.properties">
  <property key="element.name" value="$DISPATCHER$" />
  <property key="prop.MaxParallelUsers.custom" value="EXPR[( ${NUMBER_SERVER_NODES}*${MAX_HEAP_SIZE}) min
  ( ${CPU_COUNT}*${AVERAGE_CPU_SPEED}/5)]" />
  <property key="manager.name" value="ConnectionsManipulator" />
</task>
  </platform>
```




Introduction

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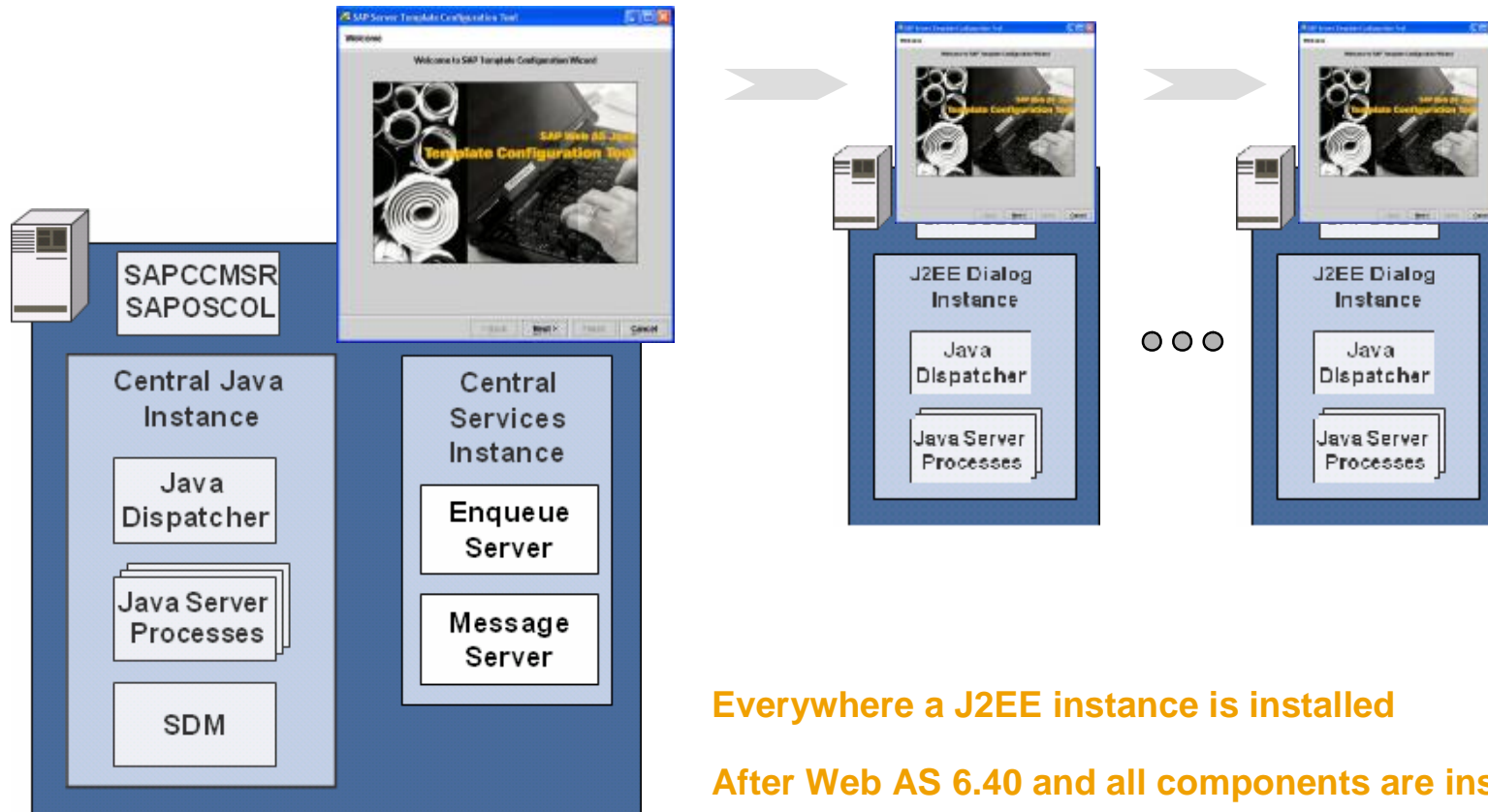
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When and Where to Apply Template Configuration Tool?

Apply the same template everywhere!



Everywhere a J2EE instance is installed

After Web AS 6.40 and all components are installed

With Web AS 6.40 stopped!

Which Template to Use?

Scenario	System Description	Template
J2EE Applications	A system in which only J2EE applications will be deployed and run	<i>J2EE-Engine-only.zip</i>
System Landscape Directory	A system where SLD is installed	<i>J2EE-Engine-only.zip</i>
SAP NetWeaver Java Development Infrastructure (JDI)	A central development infrastructure system comprising all components – that is, Design Time Repository (DTR), Change Management Service (CMS), and Central Build Server (CBS)	<i>JDI-DTR-and-CBS.zip</i>
	DTR and CBS may be also installed on separate systems.	<p><i>JDI-DTR-only.zip</i> – for the system where DTR is installed</p> <p><i>JDI-DTR-and-CBS.zip</i> – for the system where CBS is installed</p>

Which Template to Use? (II)

Scenario	System Description	Template
SAP Exchange Infrastructure (XI) *	A productive system	<i>XI.zip</i>
	A small XI dev system	<i>XI-dev.zip</i>
	A central XI dev system with DTR	<i>XI-and-DTR.zip</i>
SAP Enterprise Portal (EP)	A system for EP productive use on a multiprocessor machine	<i>Portal.zip**</i> <i>Portal_1CPU.zip****</i>
SAP Business Information Warehouse (BW)	A productive system for BW front-end applications MMR and UDI***	<i>BW.zip</i>
BI Information Broadcasting	A productive system	<i>Portal.zip</i>
SAP Mobile Infrastructure	A productive system	<i>J2EE-Engine-only.zip</i>
SAP Knowledge Warehouse	A productive system	<i>J2EE-Engine-only.zip</i>

Demo



Apply a Template to a Dialog Instance (DI)

Same procedure except:

Must make the global directory available to the DI to access the Template Configuration Tool.

Select the “*Instance Local Configuration Only*” option.



Introduction

Template Configuration Tool Details

Apply a Configuration Template

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SAP Note application component: BC-JAS-COR

SAP Notes:

- n 739788 SAP NetWeaver: Template-Based Configuration Composite Note
 - u Updated Templates for Support Package Stacks (SAP Note attachment)
- n 781882 Mandatory and optional services in J2EE Engine 6.40
- n 772752 Fine tune performance of EP 6.0 on Web AS 6.40
- n 723909- java vm settings for J2EE 630/640
- n <http://help.sap.com/nw04> > *Application Platform > Java Technology in SAP Web Application Server > Administration Manual > Server Administration > J2EE Engine Configuration > Template Configuration Tool*



Introduction

Template Configuration Tool Details

Apply a Configuration Template

Helpful Resources

Questions and Answers