

Applies To:

SAP Enterprise Portal 6, SAP NetWeaver Developer Studio, SAP Web Application Server 6.40

Summary

This document describes troubleshooting steps for Developers to get to the bottom of problems with the SAP EP roles, worksets, pages and iViews. This should be particularly useful for Developers who end up inheriting the maintenance of already developed applications and content.

By: Umair Salam

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Introduction

SAP EP developers often find themselves having to troubleshoot problems of all kinds. For a beginning developer, particularly one that inherits the work of another, it is important to know how to go about troubleshooting and resolving various Portal issues.

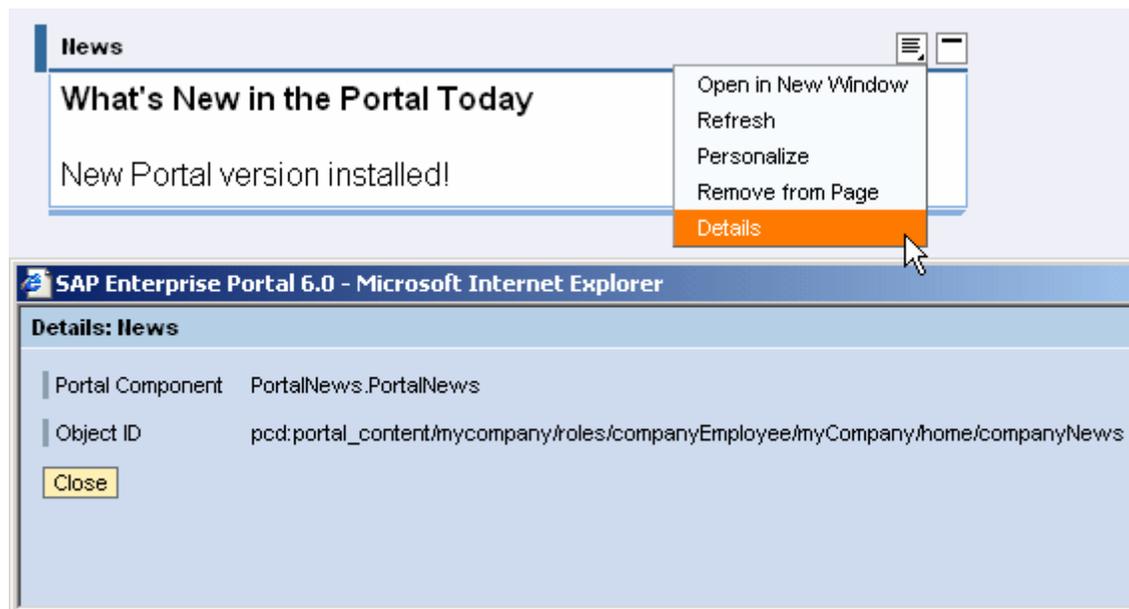
Troubleshooting Steps

Identifying and locating the problem

The first step in trying to solve any problem is identifying where the problem is. In the Portal problems could occur from a variety of different places: coding errors, system issues, support pack upgrades, stupid users, security gotchas and many more. How does a developer look for where the problem might be coming from when a trouble ticket is escalated to him or her?

Object ID

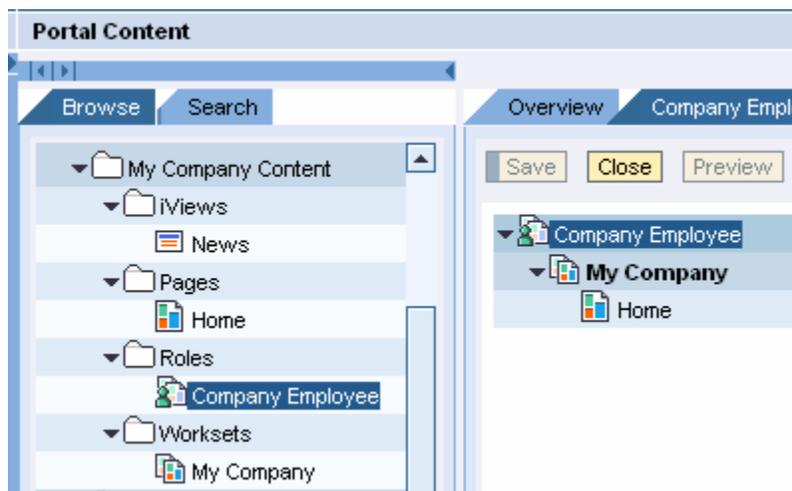
As a rule of thumb, in addition to the actual text of the error message, ask your users or Help Desk folks to provide you with an Object ID of the page or iView in question. This should be available from the Options Menu of either the Page or the iView:



Path to the Problem Page/iView

If the Object ID is not available for whatever reason, ask for how the user got to the page/iView where the problem occurred. This information is needed to figure out where the misbehaving Page or iView is.

Once you have located the iView or page which the error is occurring on, you can look in the PCD, from the Content Administration path, to get to the iView or Page. This will help identify the PCD object that's responsible for the issue at hand. Once that's determined, the properties of the offending object can be examined.



iView and Page properties

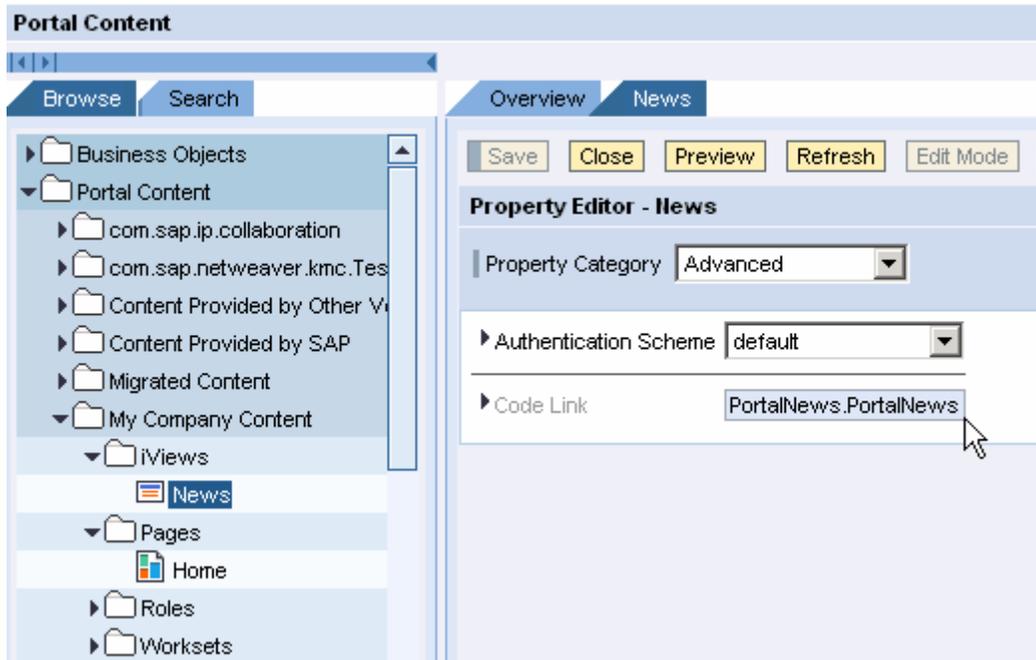
iView and Page properties usually indicate how the object was created (Java par file, Web Dynpro, BSP, Transaction iView etc.) which is what you need to know in order to start troubleshooting. For instance, if it's a problem with a BSP iView, you want to be looking at the R/3 side of things to determine if the BSPs are working there instead of looking for a Java PAR file somewhere, because there won't be one for BSP or Transaction iViews. The example I'm using is actually a custom Java iView called News, built from a Project called PortalNews and a component of the same name, as you can see in the screenshot below.

Once you've located the origins of the iView or Page, you can look at the source. For Java iViews, the source is bundled in the form of a PAR file, which can be downloaded from the Portal itself (Java Development > Portal Browser) or can be obtained from the Portal server directory structure:

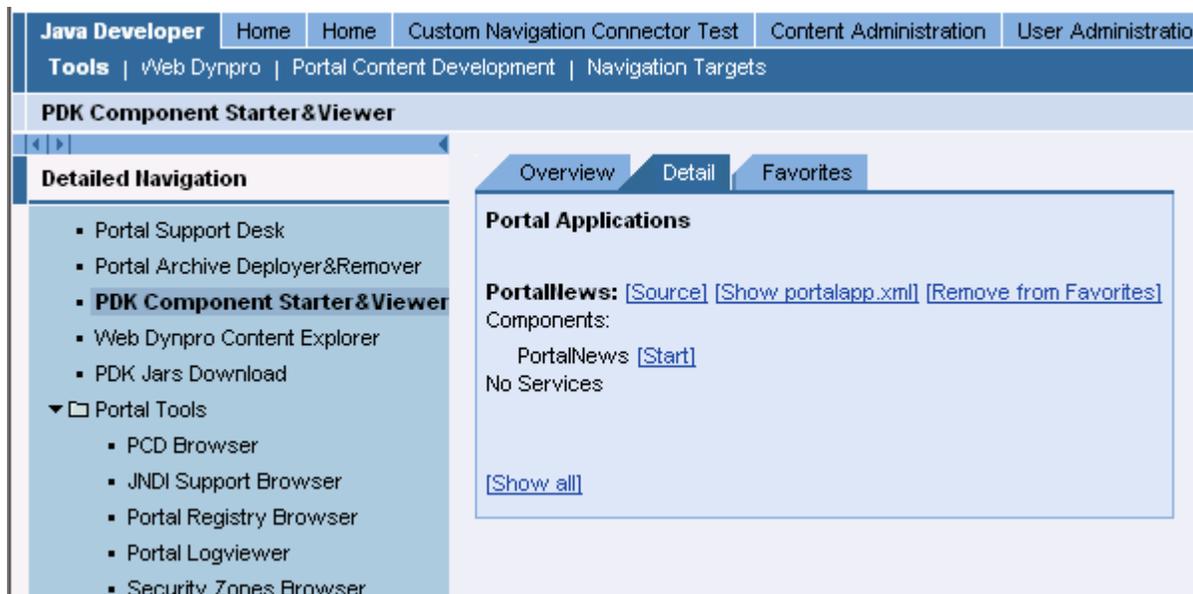
```
<portal_server_root>:\usr\sap\J2EJC00\j2ee\cluster\server0\apps\sap.com\irj\servlet_jsp\irj\root\WEB-INF\deployment\temp
```

After locating the PAR file (which is usually in the form of com.companyname.applicationname.par.bak – so you have to rename it to remove the .bak extension – you can import it into the NetWeaver Developer Studio by using the File > Import wizard and look at the source code. The corrected source code will need to be rebuilt, re-packaged into a PAR file (using the File > Export wizard) and re-deployed on the Portal to take effect. You can re-deploy the PAR file into the Portal via the File > Export wizard if your NWDS is configured

properly. Or you can upload it manually into the Portal by going to the Java Developer > Portal Archive Deployer & Remover tool.



Another useful tool that the Portal provides is the PDK Component Starter & Viewer, which is a quick and extremely handy way of running an application that has been deployed into the Portal, looking at the source code files as well as the deployment descriptor (portalapp.xml).



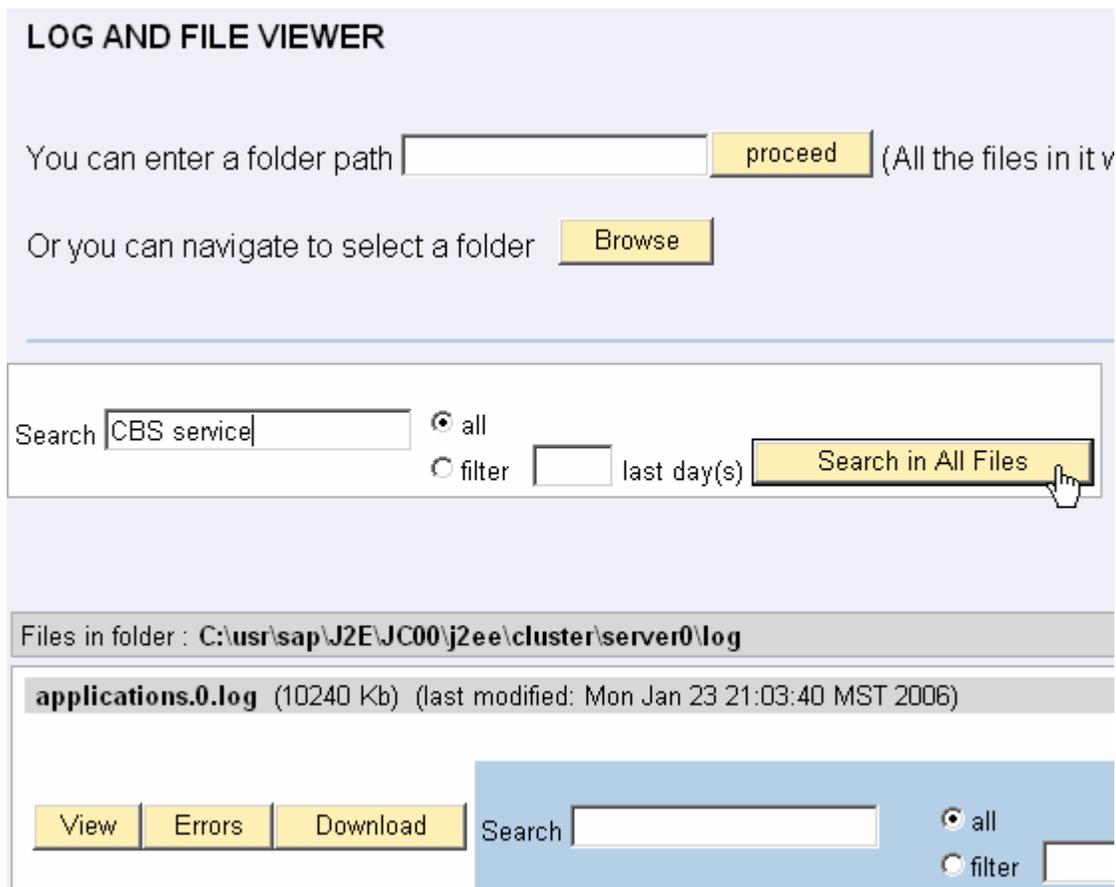
Look at the Error Logs

The portal provides a look at the error logs with a searchable interface (shown below). You can utilize this tool (found at Java Developer > Portal Tools > Log Viewer). You can do an overall search or you can narrow the search down to one of the available folders, if you know where the error you saw would be, depending on when it was logged. Alternatively, you may look at one of the available log files in its entirety, view just the errors, or download it for your offline viewing pleasure, if you're *really* bored.

The two screenshots below show a search being performed for CBS service (you can get really good results by typing (or better yet copying and pasting) the excerpts from the exact error message displayed on the portal here).

You can view traces as well. If you're building a custom application, the traces are the equivalent of the console messages you would write using, for example:

```
System.out.println("See if this block of code gets executed");
```



LOG AND FILE VIEWER

You can enter a folder path (All the files in it v

Or you can navigate to select a folder

Search all
 filter last day(s)

Files in folder : C:\usr\sap\J2E\JC00\j2ee\cluster\server0\log

applications.0.log (10240 Kb) (last modified: Mon Jan 23 21:03:40 MST 2006)

Search all
 filter

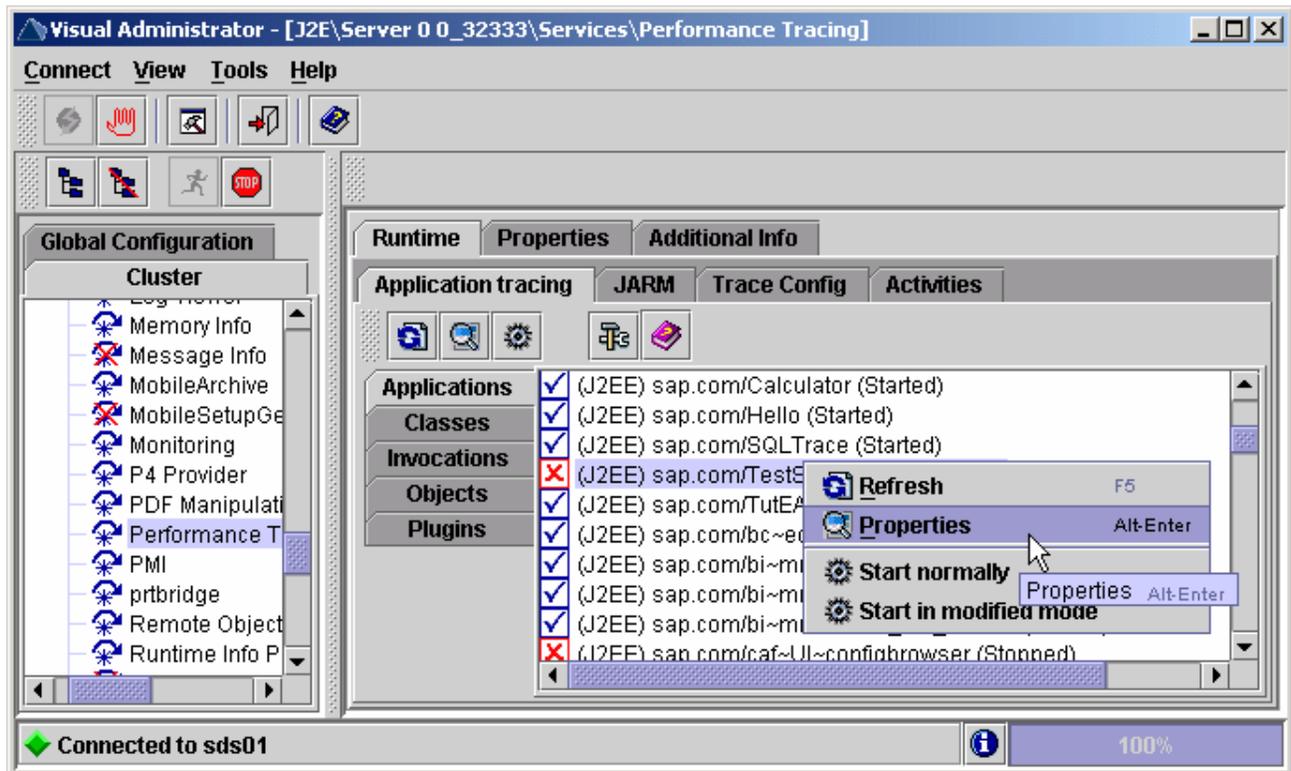
SEARCH RESULTS FOR "cbs service"

<< >>

```
<!--LOGHEADER[START]/-->
<!--HELP[Manual modification of the header may cause parsing problem!]/-->
<!--LOGGINGVERSION[1.5.3.7185 - 630]/-->
<!--NAME[.log/applications.log]/-->
<!--PATTERN[applications.log]/-->
<!--FORMATTER[com.sap.tc.logging.ListFormatter]/-->
<!--ENCODING[Cp1252]/-->
<!--FILESET[0, 5, 10485760]/-->
<!--PREVIOUSFILE[applications.4.log]/-->
<!--NEXTFILE[applications.1.log]/-->
<!--LOGHEADER[END]/-->
<< item 0 :
>>#1.5#02004C4F4F500033000000000000007B800040AC5627ACE30#1137742
[impl:5]_62##0#0#Info#1#com.sap.tc.cbs.service.CBSFrame#Java###Starting
CBS service on node {0}...#1#3233350#
<< item 1 :
>>#1.5#02004C4F4F500033000000001000007B800040AC5627B517B#1137742
[impl:5]_62##0#0#Warning#1#com.sap.tc.cbs.service.CBSFrame#Java###A non-
existent file path has been specified in the CBS Service settings on the node {0} for
```

Visual Administrator

Visual Administrator provides a whole set of tools to manage/configure/restart services and application on the Portal/J2EE server. Even if no one has reported any problems, you can take a look at various things in the Visual Administrator to see if anything is not working as it should. Red usually means trouble of some sort, but not always. You can usually right click to get to some details about information, as a lot of info is hidden away but accessible via the context menu.



Researching for Information

There are many resources available on troubleshooting problems in the Portal. I've tried to list some of the most important ones:

- [SDN Forums](#): You can usually find answers to most questions here and very fast
- [SAP Help](#): Try the TREX Search: You can search SAP's official documentation
- [SAP NetWeaver Problem Analysis Guide](#): I regard this vital for any Portal team to keep this handy

Conclusion

Portal troubleshooting doesn't have to be difficult. You should follow the steps outlined above to locate the problem, identifying what type of issue it is, where it originated from. You can then utilize the resources as I have illustrated above to resolve any portal issue rapidly.

Author Bio



Umair Salam is an SAP Enterprise Portal Developer, in the HR area, developing in Java/JSP and SAP's new and exciting Web Dynpro technology. Umair has led a Portal implementation project as a technical lead and continues to build and provide support for the Portal. Umair actively blogs on SDN and participates in the SDN Forum, trying to get his problems solved as well as solve problems that fellow developers around the world are faced with.

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