

Getting Started with Deploy Metrics

Introduction

This guide covers, step by step, how to get Deploy Metrics

- *Installed and configured.*
- *Tuned*
- *And integrated into your organization.*

Installation and Configuration

[1] Unpacking the distribution

[2] Checking out the installation

[3] Align with your setup

Tuning

[4] Processing your own logs

[5] dplmetrics_logs Orange Coded Entries

[6] Adding Error Definitions

Integration into your organization

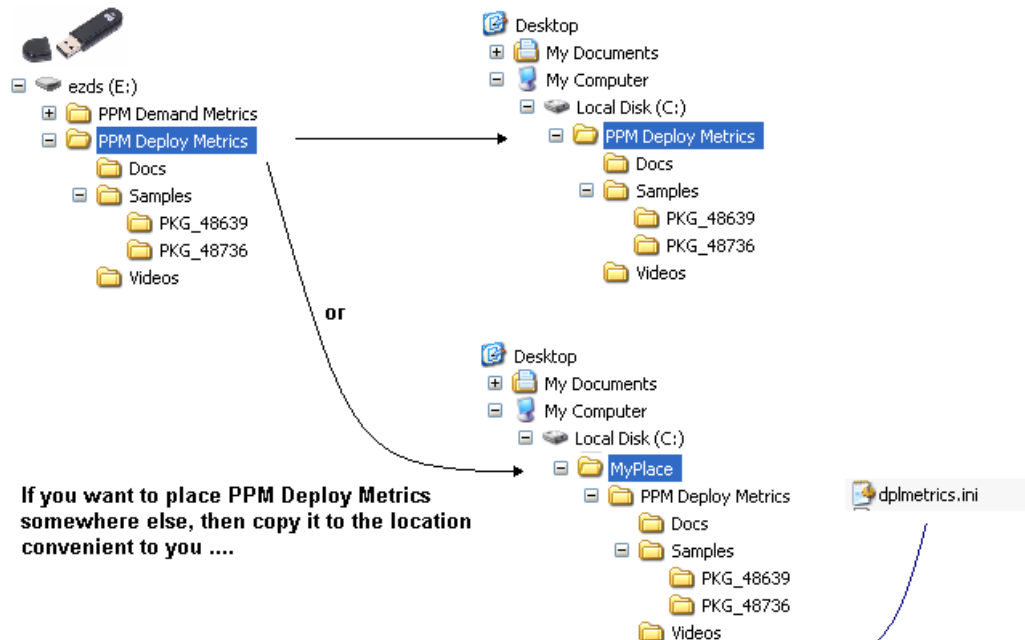
[7] Making Logs Available

[8] Locating Deploy Metrics

Installing and Configuring Deploy Metrics - [1] Unpacking the distribution

▶ Click the arrow to stop and restart the video.

You can either copy the PPM Deploy Metrics directory from the flash drive to its default location C:\PPM Deploy Metrics



If you want to place PPM Deploy Metrics somewhere else, then copy it to the location convenient to you

Open dplmetrics.ini with Notepad

Locate the default 'Fully Qualified Output Directory Path' entry in the [Program] section.

```
[Program]  
Fully Qualified Output Directory Path="C:\PPM Deploy Metrics"
```

Change the the path value to match:

```
Fully Qualified Output Directory Path="C:\MyPlace\PPM Deploy Metrics"
```

Save and close dplmetrics.ini

Installing and Configuring Deploy Metrics - [2] Checking out the installation

 Click the arrow to stop and restart the video.

Open a command window, locate the C:\MyPlace\PPM Deploy Metrics directory and run the 'gosamples' batch file.

```
C:\MyPlace\PPM Deploy Metrics>gosamples
```

Deploy Metrics will process the log files in the 'Samples' directory and display and output html report files.

Deploy Metrics outputs html files that can be viewed in any browser.

```

-----
THROUGHPUT          January 2008 - December 2008          Thu Jul 25 13:54:33 2009
-----
Run Time : 00:00:00

Files Traversed Count           45
Files Traversed Bytes          171,351
Logs Read Count                 26
Logs Read Bytes                122,896
Packages Processed Count        2
-----
INFO      : DPM-00009 Sorting the dplmetrics_pkgs.html file
INFO      : DPM-00011 Created the dplmetrics_logs.html file successfully.

dplmetrics Version 1.3 Build 675 run end time  Thu Jul 25 13:54:33 2009

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C:\MyPlace\PPM Deploy Metrics>dir
Volume in drive C has no label.
Volume Serial Number is 8874-1DB8

Directory of C:\MyPlace\PPM Deploy Metrics

06/25/2009  01:54 PM    <DIR>          .
06/25/2009  01:54 PM    <DIR>          ..
06/25/2009  12:49 PM    <DIR>          Docs
03/10/2009  03:40 PM           57,506 dplmetrics.exe
06/25/2009  01:54 PM           15,681 dplmetrics.ini
06/25/2009  01:54 PM           3,527 dplmetrics_logs.html
06/25/2009  01:54 PM           3,530 dplmetrics_pkgs.html
06/25/2009  01:54 PM          16,299 dplmetrics_rpts.html
06/25/2009  01:54 PM           4,839 dplmetrics_type.html
01/06/2009  05:47 PM             101 gosamples.bat
03/06/2009  04:00 PM             1,201 license.dat
06/25/2009  12:49 PM    <DIR>          Samples
06/25/2009  12:49 PM    <DIR>          Videos
               8 File(s)          102,684 bytes
               5 Dir(s)          1,074,450,432 bytes free

```

They are placed in the directory you specified in the previous slide with the 'Fully Qualified Output Directory Path' setting.

You should have a new set of dplmetrics html files.

It's a good idea to look through them to get a feel for what each report does.

The dplmetrics_logs and dplmetrics_pkgs files contain the information you'll need first to tune PPM Deploy Metrics and later to drill down research specific errors. They contain the details of every migration.

The dplmetrics_rpts.html file contains Analysis reports (Manual Chapter 5) and Audit reports (Manual Chapter 6)

The dplmetrics_type.html file contains a time-lapse visualization of changes in migration errors. (Manual Chapter 7)

Installing and Configuring Deploy Metrics - [3] Align with your setup



Before you can run Deploy Metrics against your own logs you need to do two simple customizations.

1. Tell Deploy metrics the names of the Custom object types you migrate.

In SQLRunner or Toad run this SQL:

```
select nl.meaning "Object Category",
       dot.object_type_name,
       dot.description
from KDLV_OBJECT_TYPES dot,
     KNTA_LOOKUPS nl
where dot.enabled_flag = 'Y'
      and nl.enabled_flag = 'Y'
      and dot.object_category = nl.lookup_code
      and nl.lookup_type = 'OBJECT_CATEGORY'
order by nl.meaning, dot.object_type_name
```

You'll find this SQL

In the PPM Deploy Metrics directory (*dplmetrics.sql*)
and also in Chapter 10 of the *Installation and Operation Guide*

Use the output to

Open *dplmetrics.ini* in Notepad.

The default Custom object names are set to work with the Sample logs

```
[Custom Error Objects]
Cnt=2
1=SQL Migration
2=Library
```

Replace the entries with your own object names e.g:

```
[Custom Error Objects]
Cnt=4
1=SQL Version 1.2
2=Java Class Files
3=Library
4=DLL
```

Number the entries from 1 up and set Cnt to the maximum number.

2. Tell Deploy Metrics what version control system you are using

Locate the VC= entry in the [Custom Error Types] section

```
[Custom Error Types]
VC=CVS Errors
```

Replace the entry with the name of your version control system e.g:

```
[Custom Error Types]
VC=ClearCase
```

Save and close *dplmetrics.ini*

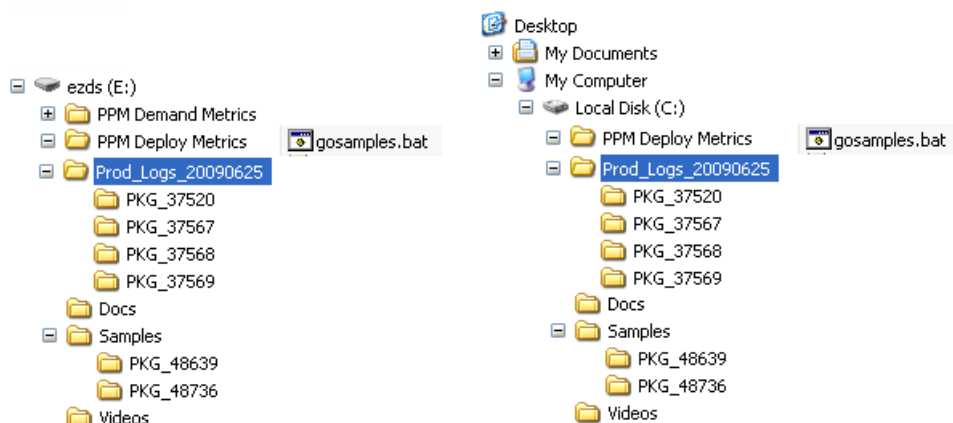
Installing and Configuring Deploy Metrics - [4] Processing your own logs

 Click the arrow to stop and restart the video.

Use FTP to download the PKG_99999 directories and their contents from the (PPM Home)/logs directory on the PPM Application server

Check out the size of the logs before doing the download and make sure if you are using a laptop that it has sufficient disc space to hold them. You don't necessarily need all the logs to tune Deploy Metrics, but we do suggest at least 100 PKG_99999 directories, preferably the latest.

We suggest you plug your logs into the default or your custom tree like this:



There's a `gosamples.bat` file in the PPM Deploy Metrics directory. It contains the invocation for deploy metrics:

```
dp1metrics "c:\PPM Deploy Metrics\Samples" Process=All Display=Off From=January 2008 To=December 2008
```

We suggest you copy it to, say `gologs.bat` and edit this with Notepad. You should change the first parameter to match the name you chose for your logs directory. Change the From and To parameters to the date range you want to process. Leave the Process and Display parameters as-is for now.

```
dp1metrics "c:\PPM Deploy Metrics\Prod_Logs_20090625" Process=All Display=Off From=January 2009 To=December| 2010
```

Now open a command window, navigate to the PPM Deploy Metrics directory enter `gologs` and press enter. Deploy Metrics should be running on your logs!

Next Up Tuning Deploy Metrics

Tuning Deploy Metrics - [5] dplmetrics_logs Orange Coded Entries

 Click the arrow to stop and restart the video.

Out of the box Deploy Metrics comes ready to handle about 190 common errors that can occur migrating CUSTOM objects, and about 50 errors that can occur migrating STANDARD objects.

The first run with your own logs will come up with migration errors that are unique to your organization. You need to train Deploy Metrics to handle these unique errors.

Deploy Metrics makes this relatively straightforward.

Use File Open in your browser to open the dplmetrics_logs.html file

Look for orange colored entries like these:

```
STANDARD [??] [Concurrent Manager encountered an error ] f s 30223 1 .....  
CUSTOM [??] [Errors Occurred during Command Execution ] f s 30545 4 .....
```

This column is PPM's opinion of the outcome of the migration (f=failure).
This column is the Deploy Metrics tool's opinion (s=success).
The reason that Deploy Metrics considers the migration a success is that it can't find any of the pre-defined out-of-the-box errors in the log.

Some of the orange coded entries occur because Deploy Metrics doesn't have strings pre-defined for the errors that can occur when a PPM CUSTOM object is checked out from your specific version controlsystem.

The rest are errors for which Deploy Metrics doesn't have a pre-defined match.

To fix this situation you need to find an error string in the log that characterizes the error, and then define this to Deploy Metrics so that it will be properly recorded as an error on the next run.

Deploy Metrics will then color code the error red to indicate that PPM and Deploy Metrics both agree that the migration failed.



Tuning Deploy Metrics - [6] Adding Error Definitions



Click the arrow to stop and restart the video.

1. Click on the orange line, to open the underlying log and look through it.
You want to locate something that uniquely defines the error. For example:

```
Checkout failed
ORA-02170: TNS:Connect timeout occurred
Error: source file not found
```

Important! The string you pick must not include anything that varies from log to log.
'Error: source file not found' is Ok. 'Error: source file {somefilename} not found' is not.
In this case you would have to go with 'Error: source file'.
Using 'not found' would be a bad choice as it might legitimately occur in the log without indicating an error.

2. Now add an error definition to the dplmetrics.ini file so that Deploy Metrics will catch the error next time around.

Add your new entries at the end of either the [Custom Error Codes] and [Standard Error Codes] sections:

```
[Custom Error Codes]
Cnt=192
191=VC| |checkout failed
192=TO| |ORA-02170: TNS:Connect timeout occurred

[Standard Error Codes]
Cnt=51
51=OM| |Error: source file not found
```

- The number is just a sequence number. Use the next up.
 - The two-letter code indicates the error type. Pick an appropriate code from the [Standard Error Types] or [Custom Error Types] section. If there isn't a good type code then define a new one.
 - A | | (bar-space-bar) follows the two letter code
 - Place the error string directly after that. Use Copy-n-Paste to avoid transcription errors!
 - Lastly set the Cnt= value to the sequence number of the last entry.
3. Run Deploy metrics again. When no orange coded entries show up in dplmetrics_logs.html customization is complete.

Refer to the Installation and Operations Guide 'Handling Orange color coded errors' section for more detail and worked examples.

Next Up Integrating Deploy Metrics

Integrating Deploy Metrics into your organization - [7] Making Logs Available

 Click the arrow to stop and restart the video.

There's no one way to fit Deploy Metrics into your organization. How this is done depends on your unique requirements.

Even though Deploy Metrics is a read-only application, good security practice suggests that you should not run it directly against the logs tree on the production PPM application server.

GETTING STARTED

For initial configuration, tuning, and testing we suggest you

- *Request the group in charge of the PPM Production application server to copy the {PPM Home} /logs/PKG_nnnnn directories to any convenient server outside the firewall to which you have access. We'll call this the 'DM' server.*
- *Download the extracted logs tree with FTP (Putty) to a Windows laptop. As long as you have sufficient disc space Deploy Metrics will run comfortably on a laptop.*

AUTOMATION OPTIONS

Going forward you want to automate the periodic transfer of the logs tree from the production PPM Application server, preferably at a time when the application server and network are relatively unloaded to the server outside the production firewall. Possible solutions are:

- *A simple script run under a scheduler or cron job to FTP the logs.*
- *A two-step PPM Deployment workflow to FTP the log tree from the PPM Production application server.*

Under either of these options the script or workflow command step logic can be extended to execute Deploy Metrics on the new logs.

Deploy Metrics Installation and Operations Guide references

- *Chapter 7 : Flash player settings for the time lapse report.*
- *Chapter 8 : Accessing your own package Logs*

Integrating Deploy Metrics into your organization - [8] Locating Deploy Metrics

 Click the arrow to stop and restart the video.

With an automated process in place for making production logs available we can now focus on where to place the extracted log tree and how the Deploy Metrics program will access it.

DM SERVER OPERATING SYSTEM

dplmetrics is a Windows executable.

- If the DM server is running Unix then the options are to
 - *Use Samba to mount the DM server logs directory as a logical drive to a Windows Server or Client running dplmetrics.*
 - *FTP the logs from the DM server to a Windows Server or Client and run dplmetrics there.*
- If the DM server is running Windows Server then the options are to
 - *Run dplmetrics directly on the DM server.*
 - *Mount the DM server logs directory as a logical drive to a Windows Server or Client running dplmetrics.*
 - *FTP the logs from the DM server to a Windows Server or Client and run dplmetrics there.*

IT SERVICE MEASUREMENT, VISUALIZATION AND REPORTING

While you are familiarizing yourself with Deploy Metrics, and until you have made progress on your action plan to bring your service levels to your targets you may want to create Deploy Metrics reports and charts locally on your own laptop and use that as a base for presentations.

Over time you may want to make the information available to a wider audience.

Deploy Metrics is web oriented and generates html report and chart pages which makes integration with web-based reporting systems such as Vantage Service Manager extremely simple.

dplmetrics can either be directed to output it's reports directly to a web server's html directory or the shell script or PPM Deployment workflow step code can be extended to put them there.