

Omegamon z/OS

Configuring z/OS agents with the PARMGEN method



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Omegamon z/OS®: Configuring z/OS agents with the PARMGEN method.

Objectives

When you complete this module, you can install your Omegamon z/OS agent with PARMGEN instead of the ICAT tool

This module contains the main steps to use the new installation method for Omegamon z/OS agents.

PARMGEN is a new configuration method that you can use as an alternative to the ICAT method.

When you complete this module, you can install your Omegamon z/OS agent by using PARMGEN instead of the ICAT tool.

Outline

- Advantages to using PARMGEN instead of ICAT
- Workflow PARMGEN steps
- Applying the PARMGEN PTF
- Job execution history

This module explains the key concepts needed to use PARMGEN and the advantages to using PARMGEN instead of ICAT. It provides a workflow that shows the eight steps to running a complete agent installation. For this purpose, you must apply the PTF that allows you to start with PARMGEN.

Advantages to using PARMGEN instead of ICAT

- It is fast because you use only a few z/OS batch jobs
- Each step is documented
- The job execution history is stored in a data set that is always available
- It is available as soon as you install the PARMGEN PTF
- You can configure more products in parallel and not only Omegamon products



IBM Tivoli Composite Application Manager (ITCAM) for SOA V7.1.1
1. Component: ITCAM for SOA Agent (KD4)

IBM Tivoli Decision Support for z/OS V1.8.1
1. Component: Tivoli Decision Support Agent (KDO)

IBM Tivoli System Automation for z/OS V3.1.0
1. Component: System Automation Monitoring Agent (KAH)

IBM Tivoli Advanced Audit for DFSMSshm V2.3.0
1. Component: Advanced Audit for DFSMSshm Agent (KRG)
2. Component: Common TEP Interface (KRS)

IBM Tivoli Advanced Reporting for z/OS V2.3.0
1. Component: Advanced Reporting Agent (KRH)
2. Component: Common TEP Interface (KRS)

IBM Tivoli Allocation Optimizer for z/OS V3.1.0
1. Component: Allocation Optimizer Agent (KRJ)
2. Component: Common TEP Interface (KRS)

IBM Tivoli Automated Tape Allocation Manager for z/OS V3.2.0
1. Component: Automated Tape Allocation Manager Agent (KRK)
2. Component: Common TEP Interface (KRS)

IBM Tivoli Advanced Catalog Management for z/OS V2.3.0
1. Component: Advanced Catalog Management Agent (KRN)
2. Component: Common TEP Interface (KRS)

IBM Tivoli Advanced Backup and Recovery for z/OS V2.2.0
1. Component: Advanced Backup and Recovery Agent (KRV)
2. Component: Common TEP Interface (KRS)

IBM Tivoli Tape Optimizer for z/OS V2.2.0
1. Component: Tape Optimizer for z/OS Agent (KRW)
2. Component: Common TEP Interface (KRS)

IBM Tivoli Composite Application Manager (ITCAM) for Application Diagnostics on z/OS V7.1.0
1. Component: ITCAM for Application Diagnostics, TEMA (KYH)

ITCAM for Transactions, File Transfer Enabler for z/OS V7.1.0
1. Component: File Transfer Enabler for z/OS Agent (KT1)

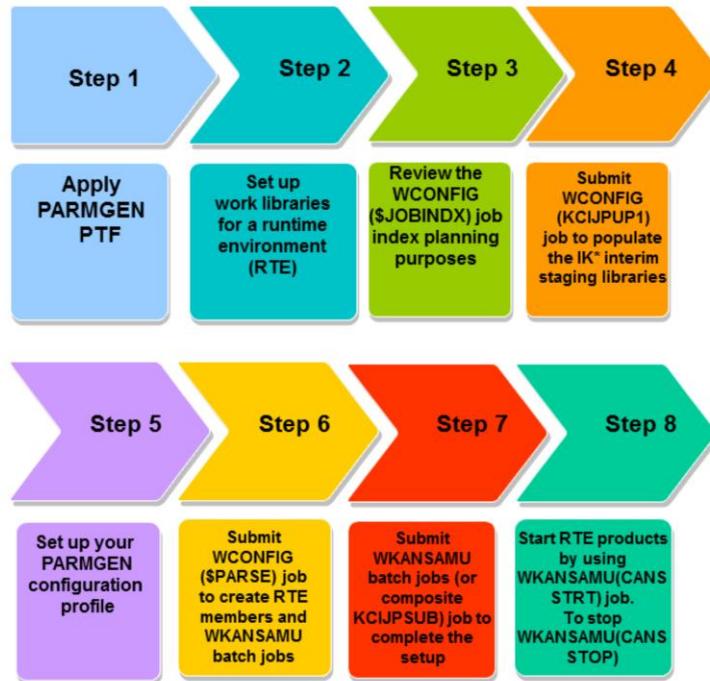
PARMGEN is fast because you use only a few z/OS batch jobs to complete an agent installation.

Each step is documented and the job execution history is always available because it is stored in specific data sets. ICAT does not store any job results.

PARMGEN is available as soon as you install one specific PTF.

Besides, you can also configure several products and not only the Omegamon ones, as indicated in the red box.

Workflow PARMGEN steps



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This slide summarizes the eight PARMGEN steps.

As described in step 1, your first action is to apply the PARMGEN PTF that updates your SMP/E environment and enables you to use PARMGEN.

Workflow PARMGEN steps

```

----- PARAMETER GENERATOR (PARMGEN) WORKFLOW - WELCOME -----
OPTION ==> _          SCROLL ==>
Enter PARMGEN parameter values appropriate for your environment:
GCL_USER: OMEG510.PARMGEN.INSTALL
          PARMGEN global user JCL library (CONFIG DD in STCs)
RTE_PLIB_HILEV: OMEG510.PARMGEN
          High-Level Qualifier (HLQ) of work libraries (IK*,MCONFIG,WK*)
RTE_NAME: OMEGAS10
          Runtime environment (RTE) name for this LPAR

Enter n (1-8) to perform tasks.          Status   Date
Enter ns (1s-8s) to display detailed status. -----
1. KCIJPCFG Set up PARMGEN work environment for an RTE.      RC= 00000 2012/04/12
2. $JOBINDEX Review PARMGEN job index.                      Viewed    2012/04/12
3. KCIJPUP1 Update interim libraries and create profiles.   RC= 00000 2012/04/12
4. KCIJPCNV Convert an ICAT RTE Batch member. (Optional)
5. OMEGAS10 Customize PARMGEN configuration profiles.       Edited    2012/05/17
6. KCIJPVAL Validate PARMGEN profile parameter values.     RC= 00000 2012/04/12
7. SPARSE Create the RTE members and jobs.                 RC= 00000 2012/04/12
8. SUBMIT Submit batch jobs to complete PARMGEN setup.     RC= 00000 2012/04/12
R New RTE Reset RTE, Status and Date fields. (Optional)

F1=HELP   F2=SPLIT   F3=END   F4=RETURN   F5=RFIND   F6=RCHANGE
F7=UP     F8=DOWN   F9=SWAP  F10=LEFT   F11=RIGHT  F12=RETRIEVE

```

EXEC 'OMG510.TKANCUS{KCIIR@PG1}'

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After you enter the TSO command, you can see the PARMGEN panel. In this slide, you can see an example of this command where OMEG510 is the high-level qualifier that is used in the environment.

All the steps that you have to submit to complete your customization are in this PARMGEN panel. The numbers 1 to 9 on the screen are the steps. In particular, you must perform steps 1, 2, 3, and 5.

Supply the values that are in the red circle before you start step 1.

Review and run the KCIJPCFG job that set up the PARGEN environment for your runtime environment, as described in step 1.

Review the \$JOBINDEX that is a readme file of the PARMGEN jobs, as described in step 2.

Review and run the KCIJPUP1 job that populates the interim staging libraries. This step is described in step 3.

Step 4 is optional and you can skip it.

Review step 5, named like your RTE to customize the PARMGEN configuration profile members. In the next slide, you can find all the details about this point.

Workflow PARMGEN steps

```
----- CUSTOMIZE PARMGEN CONFIGURATION PROFILE MEMBERS -----  
OPTION ==> _  
(Required)* Select option 1 to customize the OMEGA510 RTE LPAR profile:  
  1. OMEGA510 RTE LPAR CONFIG profile in WCONFIG  
  
(Conditional)* Select option 2 and/or 3 if applicable to this RTE:  
  2. $GBL$USR Global parameters CONFIG profile in WCONFIG  
     (Required if this is not an ICAT-to-PARMGEN conversion)  
  3. OMEGA510 System Variables CONFIG profile in GBL_USER_JCL  
     (OMG510.PARMGEN.INSTALL)  
     (Required if using user-defined symbols or overriding  
     system symbols' resolved values - see F1=Help)  
*Note: The PARMGEN configuration profiles above are preserved  
      (initially created by KCIJPUP1 job).  
  
(Reference) IBM-supplied default profiles (refreshed by KCIJPUP1 job):  
  4. $CFG$IBM IBM default RTE LPAR CONFIG profile in WCONFIG  
  5. $GBL$IBM IBM default Global parameters CONFIG profile in WCONFIG  
  6. $SYSIN   $PARSE/$PARSESV SYSIN controls  
  
(Optional) Select option 7 to edit members of the WCONFIG library:  
  7. WCONFIG  OMG510.PARMGEN.OMEGA510.WCONFIG  
Enter=Next  F1=Help  F3=End/Cancel
```

This slide shows the PARMGEN panel for the configuration profiles. You can see these options to configure the profile members.

Workflow PARMGEN steps

```

----- PARAMETER GENERATOR (PARMGEN) WORKFLOW - WELCOME -----
OPTION ==>          SCROLL ==>
Enter PARMGEN parameter values appropriate for your environment:
GBL_USER_JCL:  OMSG510.PARMGEN.INSTALL
                PARMGEN global user JCL library (CONFIG DO in STCs)
RTE_PLIB_HILEV: OMSG510.PARMGEN
                High-Level Qualifier (HLQ) of work libraries (IK*,MCONFIG,WK*)
RTE_NAME:      OMEGAS10
                Runtime environment (RTE) name for this LPAR

Enter n (1-8) to perform tasks.
Enter ns (1s-8s) to display detailed status.
-----
1. KCIJPCFG Set up PARMGEN work environment for an RTE.      RC= 00000 2012/04/12
2. $JOBINDX Review PARMGEN job index.                       Viewed   2012/04/12
3. KCIJPUP1 Update interim libraries and create profiles.   RC= 00000 2012/04/12
4. KCIJPCNV Convert an ICAT RTE Batch member. (Optional)
5> OMEGAS10 Customize PARMGEN configuration profiles.       Edited   2012/05/17
6. KCIJPVAL Validate PARMGEN profile parameter values.     RC= 00000 2012/04/12
7. $PARSE Create the RTE members and jobs.                 RC= 00000 2012/04/12
8. SUBMIT Submit batch jobs to complete PARMGEN setup.     RC= 00000 2012/04/12
K New RTE Reset RTE, Status and Date fields. (Optional)

F1=HELP      F2=SPLIT      F3=END       F4=RETURN    F5=RFIND     F6=RCHANGE
F7=UP        F8=DOWN       F9=SWAP     F10=LEFT    F11=RIGHT   F12=RETRIEVE

```

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After you have customized the profiles, you can move to step 6. For this step, you must review and run the KCIJPVAL job that validates the parameter value settings you set.

At step 7, you must review and run the \$PARSE job. This job creates the RTE, populates the WKANSAMU libraries, and creates all the jobs that you submit in step 8.

If your RTE contains system variables, then the name of the job you have to use \$PARSEV.

You have to review step 8, named SUBMIT, to complete the PARMGEN setup. In the next slide, you can find all the details about this point.

Workflow PARMGEN steps

```

----- SUBMIT BATCH JOBS TO COMPLETE PARMGEN SETUP -----
OPTION ==>                                SCROLL ==> PAGE

Select option 1 to SUBMIT the full set of composite jobs in WKANSAMU.
Alternatively, select other options to SUBMIT each job individually.
Press F1=Help for additional considerations when selecting options 4-11.

Note: Enter ns (1s-12s) for detailed task status.                Status      Date
-----
1.  KCIJPSUB Composite master SUBMIT job
2.  KCIJPALO Allocate runtime libraries                        RC= 00000 2012/02/24
3.  KCIJPLOD Load TK*->RK* runtime libraries                  RC= 00000 2012/04/12
4.  KCIJPSEC Product security (Conditional)                  RC= 00000 2012/02/27
5.  N/A System Variables IEBUPDTE (Conditional)
6.  KCIJPUSP USS preparation (Conditional)                    RC= 00000 2012/02/27
7.  KCIJPUSS USS system set-up (Authorization required)      RC= 00000 2012/02/27
8.  KCIJPSYS System set-up (Authorization required)          RC= 00000 2012/02/28
9.  KCIJPLNK ASM/Link RKANMODU modules (Conditional)        RC= 00000 2012/02/28
10. KCIJPCPY Backup IK*,WK* or RK* user lib. (Conditional)
11. KCIJPW2R WK*->RK* deployment (Conditional)              RC= 00000 2012/02/28
12. KCIJPIVP Configuration verification                      RC= 00004 2012/02/28
Enter=Next F1=Help F3=End/Cancel

```

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This slide shows the panel for the SUBMIT BATCH JOBS. As you can see, you have two options: run the KCIJPSUB job or run all the jobs that are listed from step 2 to step 12.

The suggestion is to run the KCIJPSUB composite job that automatically submits each single job in one step.

You can use the CANSSTRT and CANSSTOP jobs in the WKANSAMU library to start and stop the products inside the RTE.

Apply PARMGEN PTF

To download the latest available PARMGEN PTFs consult the PARMGEN Technote:
PARMGEN Configuration for OMEGAMON/TMS Products on z/OS

<http://www-304.ibm.com/support/docview.wss?uid=swg21417935>



Suggestion: back up the current SMP/E before applying PTF

In the Technote, you can find all the available PTFs that you can use to start the PARMGEN. Each PTF supersedes the previous one.

Back up your current SMP/E before applying any PTF if you need to roll back.

You can refer to the link that is shown for documentation of the PARMGEN method.

Job execution history

- **&rhilev.&rte.WCONFIG(\$IVPRPT)** shows the result of each **KCIJP*** job that you run to configure the RTE
- **&rhilev.&rte.WSUPERC** data set shows the results of a comparison between **WK*** and **RK*** runtime libraries

There are two useful data sets that track the job execution history:

In the WCONFIG library, you can check the member \$IVPRPT. It contains the results of all the jobs you submit.

In the WSUPERC data set, you can find the results of the comparison between the working and the runtime libraries. This information allows you to identify a mismatch between these libraries.

Review

- Advantages to using PARMGEN instead of ICAT
- Workflow PARMGEN steps
- Applying the PARMGEN PTF
- Job execution history

Process review.

Configuring a z/OS agent with PARMGEN includes these steps:

1. Describe the advantages to using PARMGEN instead of ICAT
2. Check all the actions that are required to work with PARMGEN
3. Apply the PTF that allows you to start with PARMGEN
4. Complete the eight steps that are required to customize your RTE
5. Always check that each step completed successfully

Summary

Now that you completed this module, you can install your Omegamon z/OS agent by with PARMGEN instead of the ICAT tool

Now you completed this module, you can install your Omegamon z/OS agent by with PARMGEN instead of the ICAT tool.

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