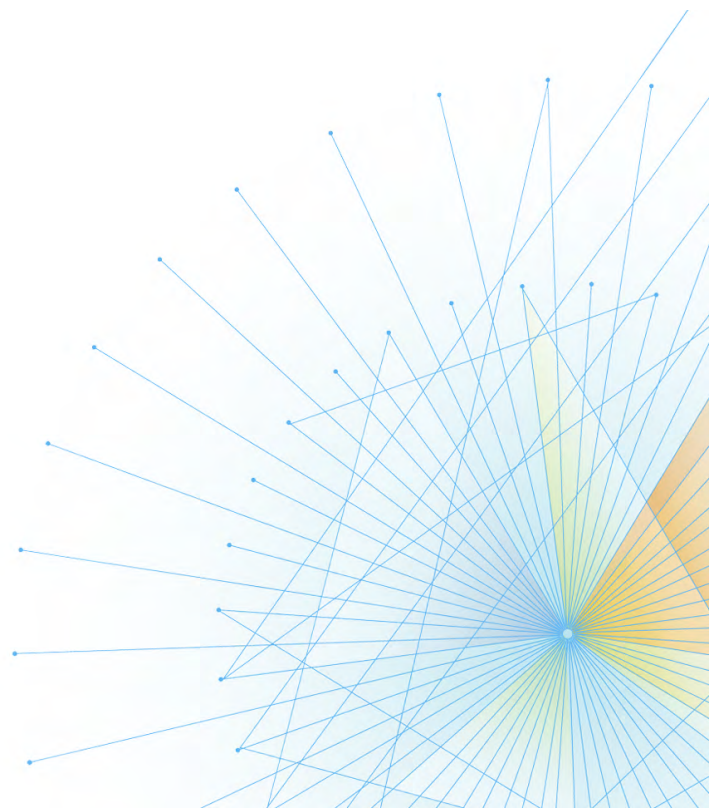




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# ThruPut Manager Release Details

**Release 18.02**



Please direct questions about ThruPut Manager  
or comments on this document to:

**ThruPut Manager Customer Support**

**<https://go.compuware.com/>**

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# Introduction

## Product Support

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## About this Manual

This manual summarizes the changes introduced with ThruPut Manager, and is updated with each new PTF level.

This manual is intended for system programmers and installation personnel involved in maintaining ThruPut Manager. It summarizes new or revised functionality, problems solved, APARs superseded, and relevant manuals updates.



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# Overview

ThruPut Manager supports and exploits z/OS Version 2. Besides this, the product packaging has been streamlined, as well as the documentation and website which is being redesigned to offer better service.

PTFs will continue to provide fixes and enhancements as well keep in step with z/OS and JES2 changes.

## Product Packaging

New packaging simplifies product installation and deployment. The former TM/Dataset Contention Services, TM/Job Binding Services, and TM/User Control Services “components” are now included with all editions of ThruPut Manager and referred to as simply DCS, JBS, and UCS, much like the JSS, VSS and other features of the product. ThruPut Manager AE includes SLM (Service Level Manager), ACM (Automated Capacity Management) DBS (Drive Booking Services) and PCS (Production Control Services) as well. These changes are reflected in on-screen dialogs, messages and in the documentation.

Installation procedures are streamlined and re-written. New defaults include enabling most features and selecting all classes for processing by SLM.





# Summary of Revisions

## ThruPut Manager 18.02 PTF TMT7118 (April 2019)

This PTF level introduces new functionality:

- Update the Annual Copyright message for 2019
- Change DTM0067I message for License Management to be deletable
- Enhance the TM D LEVEL command to display any component that has become disabled since the initial JES2 startup
- Add Health Checks for ThruPut Manager
- Make "Display" in the system log the default for any "TM BATCH" commands coming from TMSS initialization parameters. This will assist with diagnostics as to what TM commands are issued at TM startup
- Add ACM Support for Mobile and Public Cloud Workload Pricing
- Add further z/Adviser data to ThruPut Manager
- Update SLM dialog for Production Service Groups to include a "Copy" Command
- Automatic release jobs held by MHS for undefined SLM class
- Prevent operations from adding a TM reserved class (SLM/PCS) to a standard initiator via \$TI command
- Update the XCFM DISPLAY command to include TCPIP connections defined for Country Multiplex Pricing support.

NOTE - This PTF may be dynamically installed but an IPL is required to revert back to a previous level.

## ThruPut Manager 18.02 PTF TMT7117 (January 2019)

This PTF level introduces new functionality:

- Update ACM to use IBM estimated time to capping in Capacity Level considerations for z/OS 2.3 and above.
- Update PCS to remove outdated job information from the Experience File.
- Withdraw SLM SET CAPACITY JAL statement and functionality.
- Improve messaging for failed TCPIP communication for CMP processing.
- Improve Alternate Control file verification.
- Add Jesplex node and member information to z/Advisor.
- Improve New Policy Flow in SLM Dialog to allow installation to easily import a policy from another Automation File.
- Provide CMP LPAR SET data to TM GUI.

## ThruPut Manager 18.02 PTF TMT7116 (October 2018)

This PTF level introduces new functionality:

- Add Automated Capacity Management (ACM) support for Country Multiplex Pricing (CMP) across SYSplexes.
- Add support for Luminex storage devices for DBS.
- Enhance Automated Services dialog to allow:
  - Selection of Previous AF
  - Export/Import of SLM Policies
- Add functionality to collect ThruPut Manager usage data, create SMF records of this data, and provide the records to Enterprise Common Components to upload for use and analysis by

zAdviser. zAdviser can then measure the quality, velocity, and efficiency of Mainframe development. Refer to the *Enterprise Common Components Advanced Configuration Guide v17.2* for detailed instructions on how to enable the creation of zAdviser records.

- Produce z/Adviser data as follows:
  - Report AE jobs that have Job Binding Services (JBS), Job Limiting Services (JLS), or Dataset Contention Services (DCS) delays.
  - Report AE/SE jobs that fail analysis.
- Enhance PCS to gracefully ignore CA 7 External Tasks
- Provide mechanism for saving and restoring JLS agents

## ThruPut Manager 18.02 PTF TMT7115 (July 2018)

This PTF level introduces new functionality:

- Improved handling of ThruPut Manager License Check process
- Expand Country Multiplex Pricing Support (CMP) to include all systems in the SYSplex
- Enhance Production Control Services for CA 7 (PCS) to included significant functionality for managing Production workloads.
- Enhance Control File (CF) Coupling Facility Support (Notepad) to allow automatic recovery to an Alternate file (if provided) if the Primary fails
- Add addition JAL descriptors from z/OS 2.3
- Add additional JAL variables for JobTerm/StepTerm message processing
- Add support for Lumenix tape systems
- Improve the Dynamic Install process used in new installations
- Maintenance
  - Note: The TM Maintenance package has changed. A new single sequential file with a suffix of .MNT contains all the previous individual PTFs from TMT7105 and beyond. Review the FTP JCL and adjust the SMP/E RECEIVE job accordingly.

## ThruPut Manager 18.02 PTF TMT7114 (April 2018)

This PTF level introduces new functionality:

- Enhancement to the TM GUI: Support now includes the ability to monitor the following:
  - Production Services Queue
  - Automated Capacity Management for LPARs/LPAR Groups/LPAR Sets and CMP
- Coexistence with IBM JES3 support
  - Ignore TM JES3 processing if IBM JES3 support has been activated.
- Update the TM D LEVEL command to report TM interfaces that have become disabled.
- Provide Estimated Time to Selection information for jobs that belong to a Production Service Group.
- Significant performance improvements to SLM job selection processing.
- Change daily license check to 12 noon instead of 12 midnight to allow installations to react to an expired license during the daytime prior to their nightly batch run.

## ThruPut Manager 18.02 PTF TMT7113 (January 2018)

This PTF level introduces new functionality:

- LMS Licensing enforcement
- New Detail Action Language (DAL) for IEFACTRT - step term and job term
- Country Multiplex Pricing (CMP)
- New TM GUI support. Refer to the *Compuware Web Products Installation and Configuration Guide* and the *Messages Guide* for detailed information.
- The XCF Notepad information has moved from the Release Details to *ThruPut Manager Installation Guide*.

## ThruPut Manager 18.02 PTF TMT7112 (October 2017)

This PTF level introduces new functionality:

- z/OS 2.3 support
- MHS HOLD jobs instead of failing them with a JCL error for unavailable DBS units, undefined JBS agents, and undefined scheduling environments.
- TM interface to Strobe
- Change to the calculation for the required number of JES2 BERTs. Refer to the *ThruPut Manager Installation Guide* for detailed information.
- It also contains fixes to known problems and supersedes a number of APARs. It includes new and updated (since TMT7110 and TMT7111) messages, operator commands, and JAL statements

## ThruPut Manager 18.02 PTF TMT7111 (July 2017)

This PTF level introduces new functionality:

- Job selection performance improvement for \$ACTIVATE in Z22 mode

## ThruPut Manager 18.02 PTF TMT7110

This PTF level introduces new functionality:

- Implementation of Compuware License Management System (LMS).
- New interface to CA 7 (FMID TTM7105).
- Expanded Production Services functionality. (AE and AE+)
- JAL Compare Utility.

It also contains fixes to known problems and supersedes a number of APARs. It includes new and updated (since TMT7109) messages, operator commands and JAL statements.

This PTF level also introduces Compuware branding to various aspects of the product and documentation.

## ThruPut Manager V7 R1.0 PTF TMT7109

This PTF level introduces new functionality:

- Support the TM Control File in the Coupling Facility.
- TM AE Production Service Groups.
- TM AE Additional Improvements including consideration of Logical Processor Queueing in the TM AE Performance Algorithms.
- QUICKJOBS enhancements.

Also it contains fixes to known problems and supersedes a number of APARs. It includes new and updated (since TMT7108) messages, operator commands and JAL statements.

An updated set of manuals was produced and a new manual - Production Services Supplement is added to the set.

## ThruPut Manager V7 R1.0 PTF TMT7108

This PTF level contains fixes to known problems and supersedes a number of APARs. It includes new and updated (since TMT7107) messages and operator commands.

## ThruPut Manager V7 R1.0 PTF TMT7107

This PTF level provides support for new functionality. It contains fixes to known problems and supersedes a number of APARs. It reflects functional changes, and includes new and updated (since TMT7106) messages and JAL/DAL statements.

An updated set of manuals was produced.

## ThruPut Manager V7 R1.0 PTF TMT7106

This PTF level provides general availability support for z/OS 2.2. Additionally new functionality for Automated Capacity Manager (ACM) is introduced: LPAR Sets to support 3<sup>rd</sup> party capping solutions. Also it includes new JAL/DAL descriptors.

An updated set of manuals was produced.

Note: Due to some internal changes, a dynamic install of this PTF is not possible. An IPL is required.

## ThruPut Manager V7 R1.0 PTF TMT7105

This PTF level provides early support for z/OS 2.2. It also contains fixes to known problems and supersedes a number of APARs. It reflects functional changes, and includes new and updated messages and JAL/DAL statements. The documentation has not been reissued.

Note: At this level of code, the TM DTMLINK and ADTMLIB libraries must be copied to a PDSE format: see I\$DTMLNK in INSTALL dataset. This is a result of a code restructure and is unrelated to z/OS 2.2. Prior to PTF TMT7105 being applied, PTF TMT7104 must be accepted. To activate this level of code an IPL is required. No dynamic activation is available.

## ThruPut Manager V7 R1.0 PTF TMT7104

This PTF level provides support for new functionality and enhancements. It contains fixes to known problems and supersedes a number of APARs. It reflects functional changes, and includes new and updated (since TMT7101) messages, operator commands and JAL/DAL statements. An updated set of manuals was produced.

## ThruPut Manager V7 R1.0 PTF TMT7103

This PTF level contains fixes to known problems and supersedes a number of APARs. It also contains support for CA 7 R12. The documentation has not been reissued.

## ThruPut Manager V7 R1.0 PTF TMT7102

This PTF level contains fixes to known problems and supersedes a number of APARs. There are no substantive enhancements and the documentation has not been reissued.

## ThruPut Manager V7 R1.0 PTF TMT7101

This maintenance release:

- is the GA (Generally Available) level of Version 18.02 (also known as V7R1), and the platform for future operating system upgrades.
- is a technical fix equivalent of ThruPut Manager V6 R2.0 PTF TMT6221.
- requires changes to the parameters and settings that were used for the previous ThruPut Manager V6R2.0 installation. See MVS Solutions Technical Bulletin TM140505

- for Version 6 to Version 7 Conversion Considerations.
- may coexist in a JESplex with ThruPut Manager V6R2.0 as follows:
  - ThruPut Manager V6R2.0 must be executing TMT6209 and above.
  - for z/OS 2.1:
    - where ThruPut Manager VR62.0 will also run z/OS 2.1, apply all Version 6 fixes as outlined in MVS Solutions Technical Bulletin [TM140317](#).
    - where ThruPut Manager V6 will run z/OS 1.13 or below, ensure APAR TR62489 or TR62521 is active in the ThruPut Manager V6R2.0 system as per ThruPut Manager Technical Bulletin [TM130930](#).

## ThruPut Manager V6 R2.0

ThruPut Manager Version 6 has been functionally stabilized. Please contact Compuware Customer Support for service discontinued dates.



# Summary of Revisions by Edition

This version of ThruPut Manager Version provides new functionality and enhancements from previous releases. Review these points for any action needed in your data center, including making use of new features, exploiting new operating system or JES2 features, and aligning any changes that are relied upon by external software such as automated operators.

## New/Revised Functionality by Edition (SE, AE, and AE with PCS)

The functionality updates are organized by relevance to each ThruPut Manager edition.

### ThruPut Manager All Editions

PTF Level	Description	Reference
TMT7118	Update the Annual Copyright message for 2019.	
	Change DTM0067I message for License - N/A Management to be deletable.	Messages
	Enhance the TM D LEVEL command to display any component that has become disabled since the initial JES2 startup.	
	Add Health Checks for ThruPut Manager.	Installation Guide Messages

PTF Level	Description	Reference
TMT7117	Improve Alternate Control file verification by issuing message if the defined alternate is NOT cataloged.	Messages

PTF Level	Description	Reference
TMT7116	Produce z/Adviser data for any job that fails Analysis	To enable, refer to the <i>Enterprise Common Components v17.2 manual</i>
	Provide mechanism for saving and restoring JLS agents	Command Reference Guide
	Add CA 7 NCF Support	

PTF Level	Description	Reference
TMT7115	Improved handling of ThruPut Manager License Check process to allow TM to run for 24 hours.	Installation Guide System Programming Guide Base
	Add additional JAL descriptors from z/OS 2.3	JAL Reference Guide
	Add additional JAL variables for JobTerm/StepTerm message processing	DAL Reference Guide
	Add support for Lumenix tape systems	JAL Reference Guide
	Improve the Dynamic Install process used in new installations	Contact Compuware For more details

PTF Level	Description	Reference
TMT7114	Coexistence with IBM JES3 support	JES3 Compatibility Services Guide
	Update the TM D LEVEL command to report any TM interfaces that have become disabled	Messages
	Annual update to copyright message for 2018	

PTF Level	Description	Reference
TMT7113	LMS enforcement	Base System Programming Guide
	New DAL to support IEFACTRT step and Job Term messages	<ul style="list-style-type: none"> <li>• DAL Reference Guide</li> <li>• Base System Programming Guide</li> <li>• Command Reference Guide</li> </ul>



PTF Level	Description	Reference
TMT7112	<p>z/OS 2.3 support</p> <ul style="list-style-type: none"> <li>• Email address as userid <ul style="list-style-type: none"> <li>- New JAL Variables have been added</li> </ul> </li> <li>• Notify Statement <ul style="list-style-type: none"> <li>- New JAL variables have been added</li> </ul> </li> <li>• Dynamic Job Sequencing <ul style="list-style-type: none"> <li>- Jobs flow normally through TM processing</li> <li>- AE flower box will show delays under DJC</li> <li>- AE flower box will indicate the following Job used the following z/OS facilities: DJC with dependencies (may delay SLM recognition)</li> </ul> </li> <li>• Initialization Deck Checker <ul style="list-style-type: none"> <li>- Support added to ensure TM statements do not cause a failure.</li> <li>- Check issues a RC 04 with message DIAGNOSTIC WARNING STATEMENT BYPASSED BY INSTALLATION EXIT</li> <li>- To verify TM JES2 initialization deck use the TM command \$MJ,TMPARM=dsname(member),CHECK</li> </ul> </li> <li>• Emergency Subsystem (Privileged) <ul style="list-style-type: none"> <li>- TM treats any job submitted from the Emergency subsystem as an exempt job. It is not analyzed. Any TM JECL statements are ignored. However if the job requires access to a dataset that is unavailable, it will be held by DCS instead of waiting for the dataset in the initiator.</li> </ul> </li> </ul>	JAL Reference Guide
	<p>MHS HOLD jobs instead of failing the with a JCL error for</p> <ul style="list-style-type: none"> <li>• Unavailable DBS units</li> <li>• Undefined JBS Agent</li> <li>• Undefined Scheduling Environment</li> </ul> <p>JAL variables associated with these values have been deleted. Review your JAL logic to determine if these are in use and adjust as required.</p>	JAL Reference Guide
	<p>TM interface to Strobe</p> <ul style="list-style-type: none"> <li>• Introduce a /*STROBE JECL statement to invoke a Strobe measurement</li> </ul>	<ul style="list-style-type: none"> <li>• JECL Reference Guide</li> <li>• Base Product System Programming Guide</li> <li>• Messages</li> </ul>
TMT7111	Job selection performance improvement for \$ACTIVATE in Z22 mode.	

PTF Level	Description	Reference
TMT7110 (GA Level)	Branding: TM V7R1 at PTF TMT7110 is now TM 18.02. All external messages have been altered to reference Compuware. The TM copyright notice references Compuware Corporation. All Panels/ISPF Messages/ Macros and Source modules have also been updated with this change.	
	Licensing: For 18.02 – TM processing is NOT dependent upon the ECC software being present in the system or the lack of a ThruPut Manager license key. TM will continue to function UNLESS it finds an EXPIRED TM license key. However, messages will be issued indicating that the license check is being performed. Customers should contact Compuware to obtain the ECC software and/or their TM license key. A future TM release will enforce the licensing requirements.	Installation Guide
	CA 7: Installations that make use of CA 7 variables in the TM Job Action Language must now install an interface to allow TM to determine the CA 7 characteristics for a job. The interface must be assembled and linked with the CA 7 macros from the customer environment. A new FMID (TTM7105) is provided to simplify this process.	Installation Guide
	JAL Compare: Allows an installation to load a second JAL for verification. Any differences between how a job was classified from the primary JAL are noted in messages in the Job SYS- MSG dataset. New TM SMF records (subtype-14) are generated, which allow the installation to produce reports. This allow the JALs to be run for a period time and compare the results of numerous jobs.	<ul style="list-style-type: none"> <li>• DAL/JAL User Guide</li> <li>• Base Product System Programming Guide</li> </ul>

PTF Level	Description	Reference
TMT7107 (GA Level)	For customers using the JES2/TM Warning Bell to maintain JES2 and TM synchronization, the macro list has been updated. Please rerun the appropriate member from the new INSTALL dataset to make sure these changes are reflected.	<ul style="list-style-type: none"> <li>• ThruPut Manager Install Dataset members (UCLING, UCLINU, UCLINUG)</li> <li>• ThruPut Manager Installation Guide - Appendix B.</li> </ul>
TMT7106 (GA Level)	This maintenance release provides <i>Generally Available</i> support for z/OS 2.2, general maintenance and housekeeping.	
	z/OS 2.2 has new JES2 features for dependent job control and deadline scheduling, similar to the ThruPut Manager feature of UCS (User Control Services) which are now available to all ThruPut Manager users since the product consolidation of V7.1 Before using the new JES2 features, we recommend that you review our comparison of z/OS and ThruPut Manager features.	" Summary of Manual Updates"

PTF Level	Description	Reference
TMT7105	This maintenance release provides <i>Early Support</i> for z/OS 2.2.	
	SAF security for ThruPut Manager operator commands. This function provides security system capability to restrict authority at the function/command level. This means that all commands will be protected under the OPERCMDS class by a resource of \$\$TM.function.command (eg. \$\$TM.JAL.REFRESH).	Operating Guide, Command Reference Guide
	JAL descriptors added to recognize the presence and content of new z/OS 2.2 SCHEDULE JCL keywords.	JAL Reference Guide
	At this level of code, the TM DTMLINK and ADTMLIB libraries must be copied to a PDSE format: see I\$DTMLNK in INSTALL dataset.	Installation Guide
TMT7104	<p>SAC Table support:</p> <p>Definitions for Batch Access Control statement <b>TYPE(BATCH_ PGM)</b> were updated.</p> <ul style="list-style-type: none"> <li>• New <b>ANY_LIBRARY(libname)</b> keyword is added. It will scan all of the data set names within the concatenation of a JOBLIB or STEPLIB.</li> <li>• Alias names are now supported for <b>DSNAME, LIBRARY</b> and <b>ANY_LIBRARY</b> keywords. If an alias name is coded in JCL it will find the matching entry in the SAC table for either the alias name or the real name.</li> </ul>	JBS System Programming Guide
TMT7101 (GA Level)	This maintenance release provides <i>Generally Available</i> support for z/OS 2.1, enhancements to ThruPut Manager, general maintenance and housekeeping.	
	Exploitation platform for z/OS and JES2 2.1	z/OS 2.1 Supplement
	<p>Support for:</p> <ul style="list-style-type: none"> <li>• 8-character job classes</li> <li>• JCL Changes</li> <li>• SYSOUT Services (SOS) for OUPUT statement and COPYCNT= DDNAME=,MERGE</li> </ul>	
	Remove ACF2 FMID	Installation Guide
	IBM <b>ALLOCxx</b> option, <b>SYSTEM.BATCH_RCLMIGDS=PARALLEL</b> . When this option is used, ThruPut Manager is not involved in HSM recalls at execution time. (For TM AE, it continues to issue HSM recalls at analysis. For TM SE it continues to issue HSM recalls at analysis if requested.	
	Allow JES3 CLASS parameter of *MAIN statement used as input class (with support for 8-char class).	

## ThruPut Manager AE

PTF Level	Description	Reference
TMT7118	Add ACM support for mobile and public cloud workload pricing	<ul style="list-style-type: none"> <li>Automated Capacity Management Guide</li> <li>AE Usage Guide</li> <li>Messages</li> </ul>
	Add further z/Adviser data to ThruPut Manager	
	Update SLM dialog for Production Service Groups to include a "Copy" Command.	AE Usage Guide
	Automatic release jobs held by MHS for undefined SLM class.	
	Prevent operations from adding a TM reserved class (SLM/PCS) to a standard initiator via \$TI command.	Messages
	Update the XCFM DISPLAY command to include TCPIP connections defined for Country Multiplex Pricing support.	
TMT7117	Update ACM to use IBM estimated time to capping in Capacity Level considerations for z/OS 2.3 and above.	Automated Capacity Management Guide
	Withdraw SLM SET CAPACITY JAL statement and functionality. The statement is ignored, message DTM4480I is issued, and the job will continue normally.	<ul style="list-style-type: none"> <li>Messages</li> <li>JAL Reference Guide</li> <li>TM AE Usage Guide</li> </ul>
	Improve messaging for failed TCPIP communication for CMP processing. All connections are attempted and message DTM7276I is issued every five minutes for any failure.	Messages
	Improve New Policy Flow in SLM Dialog to allow installation to easily import a policy from another Automation File.	TM AE Usage Guide
	Extend Country Multiplex Pricing (CMP) support in ACM to the ThruPut Manager Web Interface.	Requires Compuware Enterprise Services with ThruPut Manager Web Interface installed at level 19.3.1.
TMT7116	Add Automated Capacity Management (ACM) support for Country Multiplex Pricing (CMP) across SYSplexes	Automated Capacity Management Guide
	Enhance Automated Services Dialog to allow selection of Previous AF on the Automation File Name Selection panel (DTMAS11)	TM AE Usage Guide
	Export/Import of SLM Policies allows a policy to be exported from one Automation File and Imported into another.	TM AE Usage Guide
	Produce z/Adviser data from ThruPut Manager <ul style="list-style-type: none"> <li>Report AE jobs that have delays such as binding limiting dataset contention etc.</li> </ul>	To enable, refer to the <i>Enterprise Common Components v17.2 manual</i>

TMT7115	Add SLM Support for Multiplex Pricing within a SYSPLEX	<ul style="list-style-type: none"> <li>Automated Capacity Management Guide</li> <li>Messages</li> <li>Command Reference</li> </ul>
	Additional SLM Performance	
	Enhancements for job selection	
TMT7114	SLM Performance Enhancements to job selection	
	TM GUI: requires Compuware Web Products Release 18.3.1	
TMT7113	SLM Support for Country Multiplex Pricing	<ul style="list-style-type: none"> <li>Commands Reference Guide</li> <li>Automated Capacity Management Guide</li> <li>Messages</li> </ul>
	TM GUI	<ul style="list-style-type: none"> <li>Compuware Web Products Installation and Configuration Guide</li> <li>Messages manual</li> </ul>
TMT7110	<p>Production Services for TM AE has been enhanced to provide additional facilities as follows</p> <ul style="list-style-type: none"> <li>Constrain by Number of Active Jobs</li> <li>ACM Constraints by Service Class and Number of Active Jobs</li> </ul>	Production Services Supplement

PTF Level	Description	Reference
TMT7109	<p>Support the ThruPut Manager Control File in the Coupling Facility.</p> <p>The XCF Notepad is a copy of the ThruPut Manager Control File maintained in an IBM coupling facility. The XCF Notepad improves access to Control File data when there are several systems in the JESplex. The recommendation follows what IBM suggests for the use of the Coupling Facility for the JES2 Checkpoint; that is to use the Notepad in situations where the JESplex consists of 4 or more members (4way+ JESplex).</p>	Installation Guide
	<p>ThruPut Manager AE provides a new Production Services facility for batch automation in addition to the existing General Services facility.</p> <ul style="list-style-type: none"> <li>• The new Production Services model provides capabilities that are more oriented to production batch, while the General Services model is more suitable for non-production batch.</li> <li>• Production Services allows an installation to logically separate their production and non-production batch by supporting two queues within a JESplex. Datacenters benefit from the logical separation of batch that this provides (for example, the ability to halt all production batch or other batch or both), while the product is able to use the broader mix of batch priority, importance and service goals to achieve better batch throughput and meet batch SLA targets.</li> <li>• Existing users of ThruPut Manager AE who currently run both production and non-production batch under General Services can continue to do so. The Production Services facilities can be implemented at their convenience.</li> </ul>	Production Services Supplement (new manual)
	Extensions to Quick Jobs.	
	Consideration of Logical Processor Queueing in the TM AE Performance Algorithms.	
TMT7107	<p>Provides facility for SLM to handle Quick Jobs. This functionality is intended to provide special handling for jobs that are identified as executing extremely quickly, putting little additional load on the system, so they get selected and finish very soon after submission.</p> <p>In General Services, Quick Jobs are identified based on installation criteria using JAL.</p>	Concepts TM AE Essentials

PTF Level	Description	Reference
TMT7106	LPAR Sets <ul style="list-style-type: none"> <li>• ACM enables the installation to define subsets of the z/OS LPARs on each CPC named LPAR Sets and assign a R4HA limit to each LPAR Set.</li> <li>• ACM coexistence with 3rd party capping software. Adjust SLM policy if your installation runs 3rd party capping software package. Contact MVS Solutions support for additional information.</li> </ul>	ACM Guide
	Accelerated job selection support. Provide options in the SLM policy to allow an Accelerated job selection support to be set on or off for General Services and PCS jobs. In certain environments when jobs have to be selected immediately setting these options can be beneficial. Automation Services dialog provides these choices.	See Automation Services Dialog under Policy Configuration Options within Configure JESplex Characteristics -JESplex Customization option
TMT7101	Remove need for \$\$SLM Service Class	Setup Guide
	Remove DISCRETIONARY Service Classes from SLM Policy definition	Setup Guide

## ThruPut Manager AE with PCS

PTF Level	Description	Reference
TMT7117	Update PCS to remove outdated job information from the Experience File. Data for jobs older than 400 days is purged from the Experience File. Additionally data for steps shorter than one minute is not maintained.	
TMT7116	Enhance PCS to gracefully ignore CA 7 External Tasks.	PCS Usage Guide
TMT7115	Significant Product enhancements to support CA 7 Production Workload Scheduling - See " Summary of PCS Enhancements (TMT7115)" below and consult the Reference manuals.	<ul style="list-style-type: none"> <li>• PCS Concepts</li> <li>• PCS Usage</li> <li>• AE PCS Installation Companion</li> </ul>
TMT7107	<p>Provides facility for SLM to handle Quick Jobs. This functionality is intended to provide special handling for jobs that are identified as executing extremely quickly, putting little additional load on the system, so they get selected and finish very soon after submission.</p> <p>In General Services, Quick Jobs are identified based on installation criteria using JAL.</p> <p>For PCS jobs, the SLM Policy should contain the installation defined criteria for determining if a PCS job is to be considered a Quick Job: maximum CPU time and/or elapsed time.</p>	
TMT7105	<p>PCS dialog changes and enhancements</p> <ul style="list-style-type: none"> <li>• Defaults/Options Import/Export Batch Utility. The Import, Compare and Export actions for Defaults/ Options are now available outside of the Dialog by using the Defaults/Options Import/Export batch utility.</li> <li>• Battle Plan Summary Report Enhancement. The Battle Plan's Summary Report contains information on how many times during its Active period PCS was restarted.</li> </ul>	<p>"What's New" section within the PCS dialogs.</p> <p>See the " New/Revised Utility"</p>



PTF Level	Description	Reference
TMT7104	PCS dialog changes and enhancements <ul style="list-style-type: none"> <li>Handle triggering loops accidentally defined in the CA 7 database.</li> <li>Display a description of Alert Events on the Event Type Selection Help Panel.</li> </ul>	"What's New" section within the PCS dialogs
TMT7103	Provides support for CA 7 R12. Conversion of the AMD file is required.	" CA 7 R12 Considerations"
	New version of the PCS Data Collection Utility providing a new CA 7 response compact log in the forecast (DTM4CST7) step. The feature is activated by default and therefore an additional DD statement name DTMCA7R is required to run the utility.	" CA 7 R12 Considerations"
TMT7103	<ul style="list-style-type: none"> <li>Including CA 7 instance version with the CA 7 Version in messages</li> <li>Panels to support CA 7 R12</li> <li>Support for Schedule Ids greater than 255 (up to 999)</li> <li>Support for Scheduler Job Data Set Name or CA 7 Logical Database Name change in the AMD</li> <li>Support for "Refresh" on the Manage Active/Ready Battle Plan panel including Warnings for expired or closed BPs</li> <li>Support for Early Auto-Activation of a Battle Plan</li> <li>Support for RUN or DEMAND SET=NTR jobs</li> <li>Support for Jobs that are canceled before execution</li> </ul>	"What's New" section within the PCS dialogs
TMT7101	Provide Dedicated Capacity Management Classes for PCS managed jobs	
(GA Level)	Update return codes for PCS Forecast job (DTM4CST7)	

## Summary of PCS Enhancements (TMT7115)

- Performance Improvements to Forecast Utility.

By changing the method used to collect the forecast data, the forecast utility now executes in a fraction of the time that was used in earlier releases. The amount of time reduced will depend upon the size of the CA 7 database and the processor speed where the utility executes. Additionally, this new method allows for the removal of jobs from the Exclusion list in the AMD file. The Exclusion list was required for situations where the schedule was defined such that a FTRUC CA 7 command would loop.

- Enhanced Battle Plan Creation process.

PCS builds Battle Plans (BP) for each Production Cycle independently. In reality, at the boundary between one BP and the next one, Job Instances in the next one often have settings (e.g. Defaults/Options) affecting Job Instances in the previous one. For example, an Acceptable Time set for a Job Instance in the next BP may affect the Acceptable Times for Predecessor Job Instances in the previous BP.

Previously, such interactions between settings were not taken into account until the moment when a new Battle Plan was Activated. These enhancements allow for each Production Cycle (and therefore, each Battle Plan) to reference the NEXT Production Cycle. Knowing the relationship between Production Cycles and Battle Plans allows PCS to better handle both Acceptable Time and Production Importance settings for the respective Job Instance(s).

- Specifying Acceptable Time for ALL Production Cycles.

It is now possible to specify an Acceptable time for an entity (such as a Job Instance, Job Tree, etc.) and have the time applied across all Production Cycle(s) where that entity exists.

- Using Defaults/Options from the Next Production Cycle.

A Job Instance belongs to a certain Production Cycle based on the scheduled time of the header job of the Job Tree it is part of. From a user point of view, it may not be obvious or simple to figure out what Job Tree this Job Instance belongs to and when the job header is scheduled. A Job Instance may appear to be part of the morning Battle Plan, because it executes in the morning, but it might in fact be part of a large Job Tree with its header job scheduled early at night and, as such, be part of the night Battle Plan. A mistake in determining what Production Cycle (Battle Plan) a Job Instance belongs to may result in

Defaults/Options specified for the Job Instance in a Specific Production Cycle being not applied. To resolve this issue, a new Option was introduced in PCS:

Use the Next Production Cycle Defaults/Options.

When set to Yes and PCS did not find any Defaults/Options for the Job Instance in the current Production Cycle, a search for Defaults/Options in the NEXT Production Cycle is performed.

- Temporary Acceptable Time Shift for an entire Application.

This PCS enhancement, called the Application Acceptable Time Shift, provides the ability to shift the Acceptable Time of each Job Instance in one or more Applications by an equal amount of relative time. This Time Shift only applies to the Active Battle Plan and is not remembered. Shifting to an earlier time (e.g. subtract 2 hours) will reduce the slack time for all Job Instances that are part of that Application making them more urgent. Conversely, shifting to a later time (e.g. add 3 hours) will increase the slack time for all Job Instances that are part of the Application making them less urgent.

While this type of Acceptable Time shifting is performed for all jobs in an application, the Job Instance After-Shift option allows for a further tuning of the Acceptable Time. It is applied to the Job Instance immediately after an Application Acceptable Time Shift.

- Demand Jobs Support.

PCS uses the CA 7 Forecast to discover what jobs are scheduled to run. This technique, while working well for scheduled jobs, does not account for non-scheduled jobs (e.g. those manually demanded by operator or being triggered by an externally created data set). These non-scheduled jobs, collectively called Demand Jobs in PCS, are now supported. This support uses new discovery methods for learning about these jobs and new algorithms for relating the discovered jobs to the already existing ones. Demand Jobs used to appear in PCS as Adhoc jobs. Now, with Demand Job support, the jobs are treated as regular Battle Plan Jobs which can be assigned Acceptable Time, Production Importance and other Defaults/Options.

- Propagation of a Higher Production Importance to Predecessors.

A Production Importance (PI) set for a Job Instance can affect the PI value of its Triggered and Triggering jobs. With this enhancement, when a Job Instance is set more important (e.g. its PI is being changed from 3 to 2), the PI will be propagated to its Predecessor jobs as well. Propagation to Predecessors is controlled by a new quantity called PI Propagation Span (see Glossary for an explanation of this quantity).

- Progress (G) Line Command Enhancement.

The Progress (G) line command can be very useful for determining all the dependencies that exist amongst Job Instances. The display for the Predecessor jobs for a Job Instance was limited to 16. This limitation of 16 has now been removed. In addition, once the list of predecessor jobs is displayed, the panel that is displayed as a result of the S line command, has been enhanced to include a new column entitled Search Method. The Search Method, used by PCS to determine how the Job Instance is deemed to be a predecessor, is now displayed.

- PCS Monitoring Only Mode

PCS can now easily be switched back and forth from regular Managing/Monitoring Mode to Monitoring Only Mode. When set to Monitoring Only Mode, PCS will only monitor jobs regardless of whether they belong to a Managed or Monitored Application (i.e. Job Instances will not be managed while in this mode). Setting PCS into Monitoring Only Mode can be a very useful back out procedure in the event of an inappropriate, perhaps harmful, change was made to the setting(s) in an Active Battle Plan. Switching modes back and forth can be accomplished via this dialog or via operator command.

- Defining Filter(s) BEFORE Displaying a List of Job Instances.

Filtering a long list of Job Instances can help to reduce the list size and possibly improve the performance of the PCS dialog. Previously one had to first go to the Job Instance List panel in order to specify which Filter(s) were to be enabled, causing the entire list to first be displayed. Now, Filter(s) can be enabled BEFORE the Job Instance List panel is displayed.

- Improved handling ADATE/BDATE Job fields.

PCS used to rely on CA 7 commands for interpreting ADATE/BDATE values. The interpretation of these values by CA 7 was performed at the time when the commands were issued (i.e. the time when Data Collection utility executed) and not at the time of job submission, and therefore were incorrect. As the interpretation of both the ADATE and BDATE values are now handled exclusively by PCS, their values are now accurate.

- New View Closed Battle Plans Option.

This new option allows more than one user to view Closed Battle Plans at the same time.

- New Batch Utility to Import/Export Defaults/Options.

Import/Export AMD Defaults/Options is now possible by using a new Batch Utility. This utility can be used as an alternative to Importing/Exporting Defaults/Options via the PCS dialog.

- Enhancement to the Data Collection Utility.

Before this enhancement, if something failed during the execution of the Data Collection utility, the previously collected data in the AMD data set would be destroyed and, of course, the new data would not be available (i.e. due to the problem that occurred). With this enhancement the previously collected data remains intact until it is replaced with the new, successfully collected, data. This guarantees that even if the data collection utility fails, the previously data collected is still available and can be used for creating a Battle Plan (providing the collected data time range is still sufficient).

- LARGE AMD Data Set Support.

PCS keeps its vital data in an AMD data set. The sufficient size of this data set is critical for PCS functionality. PCS now provides support for LARGE AMD data sets. With this enhancement the maximum AMD size can be 16,777,215 tracks, or 1,118,481 cylinders.

- New AMD Data Set Allocation Enhancement.

When a new AMD data set is allocated, PCS automatically calculates the required size based on few user-entered values describing the installation. The calculation algorithm has been significantly enhanced which results in better estimates of the required size. Also, additional options are now available for allocating a new data set such as specifying SMS Management and Storage classes.

- Expanding AMD data sets.

If for any reason the current size of an AMD data set is deemed to be inadequate, it is now possible to create a larger one and to copy all the current data into it.

## CA 7 R12 Considerations

PTF Level	Description
TMT7115	<p><b>Upgrading to CA 7 Release 12 Considerations</b></p> <p>PCS requires an update of the AMD file in order to continue working with CA 7 R12. The CA 7 Identity name used by PCS to communicate with the correct CA 7 task changes under CA 7 R12.</p> <p>PCS identifies each CA 7 Instance by the following three pieces of data:</p> <ul style="list-style-type: none"> <li>• <i>CA 7 Instance name</i> (such as CA71)</li> <li>• <i>Type of the Database</i> CA 7 keeps its data in. <ul style="list-style-type: none"> <li>- Before Release 12, the Database was implemented as a VSAM file.</li> <li>- With Release 12, the Database implementation has changed to use DATACOM/AS.</li> </ul> </li> <li>• <i>CA 7 Database name.</i> <ul style="list-style-type: none"> <li>- For VSAM, it was the name of the VSAM dataset containing CA 7 Job information. PCS refers to it as the Scheduler Job Data Set name.</li> <li>- For DATACOM/AS, it is the CA 7 Logical Database Name.</li> </ul> </li> </ul> <p><b>Migration Process</b></p> <ul style="list-style-type: none"> <li>• During the migration process when the OLD CA 7 has been shut down make sure the PCS Control Region working with this CA 7 Instance is stopped.</li> <li>• Make sure no PCS Data Collection Jobs are scheduled.</li> <li>• It is recommended to exit from the PCS Dialog.</li> <li>• CA 7 exits - re-assemble any CA 7 exits being used, with the Release 12 CA 7 libraries. See CA 7 documentation for more details.</li> </ul>

PTF Level	Description
TMT7115	<p><b>Updating the AMD</b></p> <p>After CA 7 data is successfully migrated to the new Database and the new CA 7 Instance is started ...</p> <ul style="list-style-type: none"> <li>• Start PCS Dialog and select the new CA 7 Instance.</li> <li>• Select Use an Existing Database and type in the name of the AMD data set corresponding to the CA 7 Instance.</li> <li>• The CA 7 / AMD Mismatch panel will be displayed. To make sure that there is no mistake; check the Data from CA 7 Instance and Scheduler Job Data Set Name fields below your AMD data set name. They should match the Identity of the CA 7 Instance Release 11. Tab your cursor to the Adjust AMD Data Set accordingly field and press ENTER.</li> <li>• The Update CA 7 Identity saved in the AMD Data Set panel will be displayed. Make sure that the new Identity will match the correct CA 7 Instance, the one running the Release 12 code. Once everything looks good, tab the cursor to the field containing word NO, change it to YES and press ENTER.</li> <li>• Updating the Identity saved in the AMD data set is a quick process. As soon as it is done, you can start the PCS Control Region and run the PCS Data Collection utility whenever it is required.</li> <li>• Be sure to review the Forecast options available for CA 7 R12 in the PCS Usage Guide appendices.</li> </ul> <p>PCS is now ready to be used with the new CA 7 Instance.</p>

## New/Revised Messages

PTF Level	MSG ID	Description
TMT7118	DTMHZ010I	ThruPut Manager JES2 Exits
	DTMHZ012E	Error Encountered processing ThruPut Manager JES2 Exits
	DTMHZ013E	JCTXMASK was altered: _____
	DTMHZ020I	ThruPut Manager Class List
	DTMHZ022E	Error Encountered processing ThruPut Manager Job Classes
	DTMHZ023E	No ACTIVE Analyzer initiator
	DTMHZ030I	The ThruPut Manager started task (____) is active
	DTMHZ032E	The ThruPut Manager started task (____) is not active
	DTMHZ040I	ThruPut Manager Options Information
	DTMHZ042E	Error Encountered processing ThruPut Manager Options
	DTMHZ050I	ThruPut Manager SMF Exit Information
	DTMHZ053E	Error Encountered processing ThruPut Manager SMF exits
	DTMHZ054E	ThruPut Manager SMF Vector Table is missing or in error
	DTMHZ060I	Non-Standard ThruPut Manager setting encountered
	DTMHZ063E	Non-Standard settings are in effect
	DTMHZ064I	SName=_____ Code=__ license will expire in __ days
	DTMHZ065E	SName=_____ Code=__ license will expire in __ days
	DTMHZ066E	1 Job is MHS_TM held
	DTM7277I	XCFM Connection Display
	DTM8219I	SLM JESplex Status
DTM8514I	SLM Multiplex ACM Status	
TMT7117	DTM4480I	JAL "SLM SET CAPACITY_LEVEL" IS NO LONGER SUPPORTED
	DTM6076I	Locate for Alternate Control File altcname failed. Return code=rc
	DTM6423I	Restore complete. nn JLS SET commands issued.
	DTM7276I	Unable to connect to Sysplex syspname, Jesplex jespname, using Port portno, IP n.n.n.n, reason
	DTM8161I	memname AT CAPACITY LEVEL n (limitid) USAGE IS ddddd
	DTM8219I	SLMJESplexStatus

TMT7116	DTM0053I	New message: ip_or_hostname has been removed from list of connections ip_or_hostname is not in list of connections
	DTM7274E	New message: IP ip-address connected to Sysplex syspname, Jesplex jespname, does not match TM TCPIP definitions
	DTM7275E	New message: IP ip-address connected to Sysplex syspname, Jesplex jespname, does not match TM TCPIP definitions
	DTM8425E	New message: PCS XTASK command failed. Ref.code is XXXX
	DTM8426I	New message: PCS XTASK Table is ACTIVE.
	DTM8427I	New message: PCS XTASK Table is NOT in the active state. Reason: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.
	DTM8428I	New message: PCS XTASK Table has been REFRESHED and is ACTIVE.
	DTM8429I	New message: PCS XTASK Table has been REFRESHED but is NOT active. Reason: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.
	DTM8430I	New message: PCS XTASK Table is DISABLED, has to be ENABLED first.
	DTM8431I	New message: Active PCS XTASK Table is now DISABLED.
	DTM8432I	New message: PCS XTASK Table is NOT active and cannot be disabled.
	DTM8433I	New message: PCS XTASK Table has been already DISABLED.
	DTM8434I	New message: Disabled PCS XTASK Table was ENABLED and is now Active.
	DTM8435I	New message: PCS XTASK Table is NOT in the disabled state.
	DTM8436I	New message: Disabled PCS XTASK Table was ENABLED but remains NOT Active. Reason: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.
	DTM8437I	New message: PCS XTASK Table is ACTIVE. It contains the following job name patterns: XXXXXXXX  XXXXXXXX  XXXXXXXX ..... XXXXXXXX  XXXXXXXX  XXXXXXXX
	DTM8438I	New message: PCS XTASK Table is ACTIVE but contains no job name patterns.
	DTM8521I	New message: SLM Multiplex Nodes sysplexn jespsexn Update: uuuu Server: ssss Last update: yyyy.ddd hh:mm:ss memberlist
	DTM8522I	New message: No remote JESplexes are currently connected
	DTM8523I	New message: Invalid or missing LPAR Set name
	DTM8524E	New message: ACM on mmmmhas no outbound connection to sysplexnjesplexn
	DTM8525E	New message: CPC not defined in SLM Policy: tttt ss-sssss
	DTM8526I	New message: SLM event-Sysplex: sysplexnJESplex: jespsexnMember: mmmm



TMT7115	DTM6119I	New message: Redriving displays using live information from JES2
	DTM6075I	New message: I/O error on Control File "dsname", recycling to switch to Alternate
	DTM8219I	Updated message to add information regarding the <i>llll</i> CMP limit.
	DTM8508I	Updated message to add information regarding the <i>mmmm</i> CMP limit.
	DTM8517E	New message: Inconsistent LPARs for LPAR Set <i>nnnnnnnn</i> on CPC <i>tttt ss-sssss</i>
	DTM8518E	New message: Inconsistent CMP Limits for LPAR Set <i>nnnnnnnn</i>
	DTM8519I	New message: ACM removed JESplex <i>sysplexn jesplexn</i> LPAR Set <i>lpsetnam</i> CPC <i>tttt ss-sssss</i> from multiplex
	DTM8514I	Updated message to add support for SLM D MULTIPLEX LONG.
	DTM0050E	Updated message: TM is now allowed to run for 24 hours after the error is first detected.
	DTM0052I	New message: LICENSE VERIFICATION DELAYED 5 MINUTES, LMS NOT YET ACTIVE
	DTM0054E	Updated message: When ThruPut Manager is unable to verify a valid Compuware license, TM creates a 24-hour window to allow resolution of the problem before being forcibly shut down.
	DTM0055I	Updated message: A valid ThruPut Manager license was found. Processing will continue.
	DTM0056I	New message: TM LICENSE CHECKOUT RETURNED RC=xx REASON=xxx
	DTM0057E	New message: LMCHKOUT (LMS) NOT RESPONDING. TM WILL BE ENABLED.
	DTM0058E	New message: ThruPut Manager LICENSE NOT FOUND
	DTM0059E	New message: License Management Verification Failed - LMS Not Active
DTM0067I	New message: LICENSE ISSUES RESOLVED PROCESSING CONTINUES	
DTM0068E	New message: License Management Severe error RC=nn REASON=mm	

TMT7114	DTM0000I	Update copyright date to reflect 2018
	DTM0070I	New message: INVALID COMMAND SYNTAX
	DTM1118I	New message: JES3 JECL ignored due to 'INPUTDEF JES3JECL=PROCESS'
	DTM4755I	New message: JES2 Exits may be disabled due to JCTXMASK
	DTM6589I	New message: Current PCS mode: Managed/Monitored Number of BP jobs remaining being Monitored: xxxxxx Number of Adhoc jobs remaining being Monitored: xxxxxx
	DTM6590I	New message: Current PCS mode: Monitoring Only Number of BP jobs remaining being Managed: xxxxxx Number of Adhoc jobs remaining being Managed: xxxxxx
	DTM6597E	New message: PCS MONITOR command failed. Ref.code is EEE
	DTM6598W	New message: PCS is already in Monitoring Only mode
	DTM6599W	New message: PCS is already in Managing/Monitoring mode
	DTM8415W	New message: Lack of Resolved data in the WTL might impact precision of the Battle Plan predictions.
	DTM8416W	New message: Job Instance XXXXXXXXXXXX is on Demand Job List but Application YYYYYYYY is neither Managed nor Monitored
	DTM8417I	New message: PCS is running in the Managing/Monitoring mode
	DTM8418I	New message: PCS is running in the Monitoring Only mode
	DTM8419I	New message: PCS Monitoring Mode has been changed by TSO User XXXXX
	DTM8420I	New message: PCS is now running in the Managing/Monitoring mode. Number of Managed BP jobs remaining being Monitored: nnnnnn Number of Managed Adhoc jobs remaining being Monitored: mmmmmm
	DTM8421I	New message: PCS is now running in the Monitoring Only mode. Number of BP jobs remaining being Managed: nnnnnn Number of Adhoc jobs remaining being Managed: mmmmmm
	DTM8422I	New message: PCS Monitoring Mode has been changed by operator command
	DTM8423E	New message: PCS Control Region cannot create a Battle Plan due to version mismatch. Upgrade PCS Data Collection Utility and re-run it for CA 7 Instance CA73, AMD data set: XXXXXXXX.XXXXXXXX.XXXXXXXX.XXXXXXXX.XXXXXXXX
DTM8424E	New message: PCS Control Region cannot create a Battle Plan due to version mismatch. Upgrade PCS Control Region and restart it.	

PTF Level	MSG ID	Description
TMT7112	DTM6582I	New message Time requested not in trace. Reason code: n
	DTM8219I	Updated message SLM JESplex Status  Member: <i>nnnn</i> State: <i>state</i>  cpc-name Type: <i>uuuu</i> Serial: <i>vv-vvvvv</i> Logical Processors Active: <i>aa</i> Parked: <i>pp</i> Q: <i>ww.ww%</i> Capacity Management at <i>yyy.ddd</i> <i>hh:mm:ss</i> Sync: <i>s</i>  <i>mxxx</i> z 4h Avg: <i>bbbb</i> Int: <i>cccc</i> Lmt:1111 Cap: <i>dd%</i>  Avg jobs limited by Service Class. GS: <i>kkk.k</i>
	DTM8172E	Updated message WLM INDICATES SYSTEM RESOURCES CONSTRAINED ON <i>memname</i>
	DTM2356I	New message \$ACTIVATE rejected. ThruPut Manager requires <i>nnnnnnn</i> free BERTs, <i>vvvvvvv</i> available
	DTM3237I	Updated message Class Table Synchronized - Class(_) Flags(_)

PTF Level	MSG ID	Description
TMT7110	DTM0000I	<p>Message was updated to rebrand MVS Solutions to Compuware Corporation</p> <p>THRUPUT MANAGER version release.modification-number TMTptfno</p> <p>(C) COPYRIGHT 1985, 2017 COMPUWARE CORPORATION ALL RIGHTS RESERVED</p>
	DTM6604E	<p>Message was updated to rebrand MVS Solutions to Compuware Corporation</p> <p>CONTROL FILE DAMAGE CONTROL FILE FOR JBS/JLS WAS DAMAGED REPAIR WAS IMPOSSIBLE. A DIAGNOSTIC REPORT WAS CREATED. THE APPLICATION HAS BEEN STARTED WITH A COLD FORMAT. PLEASE SEND THE SYSOUT - xxxxxxxx - TO COMPUWARE CORPORATION SUPPORT ASAP.</p>
	DTM0048E	<p>New message related to the Compuware LMS</p> <p>DTM0048E UNABLE TO VALIDATE COMPUWARE TM LICENSE. PROCESSING CONTINUES.</p>
	DTM0050E	<p>New message related to the Compuware LMS</p> <p>DTM0050E UNABLE TO VALIDATE COMPUWARE TM LICENSE. TM PROCESSING STOPPED.</p>
	DTM3869I	<p>Message updated to reflect new CA 7 interface</p> <p>DTM3869I CA 7 Interface Routine (DTMCA7UI) has not been installed</p>
	DTM8219I	<p>Changed "PCS" to "PS" - Constraint display for each member has changed</p> <p>DTM8219I SLM JESplex Status Member: name State: state cpc-name Type: uuuu Serial: vv-vvvvv Logical Processors Active: aa Parked: pp Q: ww.ww% Capacity Management at yyyy.ddd hh:mm:ss Sync: s xxxx z 4h Avg: bbbb Int: cccc Lmt:llll Cap: dd% Avg jobs limited by Service Class. GS: kkk.k PS: mmm.m Avg jobs limited by Service Class: tttt.t gggg z 4h Avg: hhhh Int: iiii Lmt:llll Shr: jjjj ssss z 4h Avg: qqqq Int: rrrr Lmt:llll Constraints: General Services: Color(color) [CPU] [Inits] [Operator] ...</p>

PTF Level	MSG ID	Description
TMT7109	DTM1252I	<p>Message was updated with the one of the <i>type</i> options changes from PCS to Production_Services, SLM GENERAL SERVICES to General_Services.</p> <p>DTM1252I Job <i>name</i> - attempted to requeue to <i>type</i> Job Class x or Job <i>name</i> - unable to requeue to <i>type</i> Job Class x, using DEFAULT(y)</p>
	DTM1254I	<p>Message was updated with the one of the <i>type</i> options changes from PCS to Production_Services, SLM GENERAL SERVICES to General_Services.</p> <p>DTM1254I JOB <i>jobname</i> - held due to undefined SLM <i>type</i> Job Class</p>
	DTM1255I	<p>Message was updated with the one of the <i>type</i> options changes from PCS to Production_Services, SLM GENERAL SERVICES to General_Services.</p> <p>DTM1255I Job <i>jobname</i> - held due to invalid requeue class x or Job <i>jobname</i> - held because of attempt to requeue to <i>type</i> class which is set to NONE or Job <i>jobname</i> - attempted to use <i>type</i> services but Job Class is set to NONE</p>

PTF Level	MSG ID	Description																
TMT7109	DTM1259I	<p>Message was updated to change "Production Profile" to "Production Service Group".</p> <p>DTM1259I Job name - unable to verify Production Service Group (<i>name</i>), <i>defaults used</i>.</p>																
	DTM3233I	<p>Message was updated to change "PCS" to "Production_Services", and "General Srvcs" to "General_Services".</p> <p>DTM3233I TM CLASS LIST</p> <table border="0"> <tr> <td>Analysis</td> <td><i>analysis-class</i></td> </tr> <tr> <td>Deferred</td> <td><i>deferred-class list</i></td> </tr> <tr> <td>Selectable</td> <td><i>select-class list</i></td> </tr> <tr> <td>Exempt</td> <td><i>exempt-class</i></td> </tr> <tr> <td>On_Demand</td> <td><i>on_demand-class</i></td> </tr> <tr> <td>Production_Services</td> <td><i>production_services-class</i></td> </tr> <tr> <td>General_Services</td> <td><i>general_services-class</i></td> </tr> <tr> <td>Default</td> <td><i>default-class</i></td> </tr> </table>	Analysis	<i>analysis-class</i>	Deferred	<i>deferred-class list</i>	Selectable	<i>select-class list</i>	Exempt	<i>exempt-class</i>	On_Demand	<i>on_demand-class</i>	Production_Services	<i>production_services-class</i>	General_Services	<i>general_services-class</i>	Default	<i>default-class</i>
	Analysis	<i>analysis-class</i>																
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	Selectable	<i>select-class list</i>																
	Exempt	<i>exempt-class</i>																
	On_Demand	<i>on_demand-class</i>																
	Production_Services	<i>production_services-class</i>																
General_Services	<i>general_services-class</i>																	
Default	<i>default-class</i>																	
DTM4472I	<p>Message was updated with the one of the <i>jclassy</i> options changes from "PCS" to "Production_Services", "SLM GENERAL SERVICES" to "General_Services".</p> <p>DTM4472I Invalid Requeue Class (<i>jclassx</i>) Using Default (<i>jclass</i>)</p> <p>or</p> <p>Attempting to requeue to (<i>jclassy</i>) but jobclass is set to NONE.</p>																	
DTM8182E	<p>New message to alert that the maximum has been reached on the indicated JESplex member.</p> <p>Maximum initiator limit in SLM Policy reached on <i>jmemN</i></p>																	
DTM8183E	<p>New message to alert that all ThruPut Manager initiators are being used on the indicated JESplex member to support General Services, Production Services, ThruPut Manager analyzers and On Demand jobs.</p> <p>Maximum initiator limit in SLM Policy reached on <i>jmemN</i></p>																	
DTM8184I	<p>New message to indicate that the named SLM Policy does not have a maximum specified for General Services and Production Services initiators for the indicated JESplex member.</p> <p>SLM Policy <i>name</i> has no initiator maximum for xxxxxx - ON DEMAND class defined</p>																	
DTM8185E	<p>New message to notify that the named SLM Policy was created or last saved by a maintenance or release level of ThruPut Manager higher than that on the indicated JESplex member which is currently loading the policy.</p> <p>SLM Policy <i>name</i> at higher level than SLM on member <i>memname</i></p>																	

PTF Level	MSG ID	Description
TMT7108	DTM2347E	New message is the response to the \$DEL command with a JOBCLASS operand specifying a class currently being used by ThruPut Manager A class presently being used by ThruPut manager cannot be deleted.  DTM2347E Class in use by ThruPut Manager: <i>jobclass</i>
	DTM2348E	New message in response to starting a job in an SLM class which is not allowed.  DTM2348E Command rejected, cannot start an SLM job
	DTM2349E	New message is the response to \$MJ command that is unable to locate a requested checkpoint block.  DTM2349E Block not found
	DTM2350E	New message is the response to \$MJ command that is unable to locate a requested job  DTM2350E Job not found
	DTM2351E	New message is the response to \$MJ command that is unable to locate a class table chained from the TMCT  DTM2352E TMCT CTBL not found: <i>x</i>
	DTM2352E	New message to indicate that class table contains a length field of zero.  DTM2352E Empty class table
	DTM2353E	New message to indicate TMCT CTBL mismatch.  DTM2353E TMCT CTBL mismatch at {+0000 x'00' table end}
	DTM3237I	New message to indicate the TM command processor has discovered inconsistencies in the TM CLASS values and it's internal class table.  DTM3237I Class Table mismatch - Class(_) Flags(_)
	DTM7110I	Message was updated with the record  +++ No Holders were returned by GRS(GQSCAN)  showing that IBM's GQSCAN service is not returning a holder for the indicated dataset.  DTM7110I <i>JOB</i> jobnumber <i>jobname</i> IN DCS state ( <i>nnn</i> ) [NODE CLAIMING LIMIT REACHED] REQ SERVICE DSNAME req service dsname Held <i>xxx</i> by <i>name</i> on system <i>sysid</i> +++ <i>nn</i> additional Holders not displayed +++ +++ No Holders were returned by GRS(GQSCAN)
DTM8182E	New message to alert that the maximum has been reached on the indicated JESplex member.  DTM8182E Maximum initiator limit in SLM Policy reached on <i>jmemN</i>	

PTF Level	MSG ID	Description
TMT7108	DTM8183E	New message to alert that all ThruPut Manager initiators are being used on the indicated JESplex member to support General Services, Production Services, ThruPut Manager analyzers and On Demand jobs.  DTM8183E Maximum initiator limit in SLM Policy reached on jmemN
	DTM8184I	New message to indicate that the named SLM Policy does not have a maximum specified for General Services and Production Services initiators for the indicated JESplex member.  DTM8184I SLM Policy <i>name</i> has no initiator maximum for xxxxxx - ON DEMAND class defined
	DTM8185E	New message to notify that the named SLM Policy was created or last saved by a maintenance or release level of ThruPut Manager higher than that on the indicated JESplex member which is currently loading the policy.  SLM Policy <i>name</i> at higher level than SLM on member <i>memname</i>
	DTM8213I	Message was updated with 'PCS OPERATOR CONSTRAINTS' line.  DTM8213I SLM SUMMARY POLICY : <i>policy-name</i> SERVICE MODE : <i>service-mode</i> SLM SERVER ON MEMBER : <i>jes2-member</i> GS OPERATOR CONSTRAINTS : <i>gs-constraints</i> BATCH SERVICE : <i>batch-service</i> PCS OPERATOR CONSTRAINTS : <i>pcsop-constraints</i> PCS SELECTION OPTION : <i>pcs-select</i> CAPACITY MANAGEMENT : <i>cmgtstatus</i>
	DTM8219I	Message was updated with 'Q: ww.ww%' field which indicates the percentage of time that the LPAR is queued to be dispatched on a physical processor.  DTM8219I SLM JESplex Status Member: <i>name</i> State: <i>state</i> cpc-name Type: uuuu Serial: vv-vvvvv Logical Processors Active: <i>aa</i> Parked: <i>pp</i> Q: <i>ww.ww%</i> Capacity Management at <i>yyy.ddd hh:mm:ss</i> Sync: <i>s</i> <i>xxxx</i> z4h Avg: <i>bbbb</i> Int: <i>cccc</i> Lmt: <i>llll</i> Cap: <i>dd%</i> Avg jobs limited by Service Class. GS: <i>kkk.k</i> PCS: <i>mmm.m</i> Avg jobs limited by Service Class: <i>tttt.t</i> <i>gggg</i> z4h Avg: <i>hhhh</i> Int: <i>iiii</i> Lmt: <i>llll</i> Shr: <i>jjjj</i> <i>ssss</i> z4h Avg: <i>qqqq</i> Int: <i>rrrr</i> Lmt: <i>llll</i> Constraints: General Services: Color( <i>color</i> ) [CPU] [Inits] [Operator] ...
	DTM8233I	Message was updated with 'f' field which is the indicator appended to the delay Dly percentage.  DTM8233I SLM Service Class Display <i>nnnnnnnn</i> Per: <i>x</i> PI: <i>pppp</i> Dly: <i>dddf</i> ADly: <i>eee</i> ACPU: <i>aaaa</i> C:c AS: <i>sss.s</i>  Dist: <i>xxxxx xxxxx xxxxx xxxxx</i>



PTF Level	MSG ID	Description
TMT7107	DTM0220I	<p>Message was modified to include <b>Time, System and Reason</b> fields.</p> <pre>DTM0220I      JOB DISPLAY jobnumber jobname jobstatus                 Class :                 Priority:                 Sysaff  : Managed: <i>application</i> Time System Reason job was not selected time system reason or TM INFORMATION NOT AVAILABLE</pre>
	DTM0563I	<p>New message is the response to the /ADS REINSTALL command.</p> <pre>DTM0563I 'module' NOT ALLOWED IN LPA. REFRESH LLA.</pre>
	DTM0564I	<p>New message to indicate the ADS command issued a REINSTALL for a task that does not issue messages when it restarts.</p> <pre>DTM0564I 'task' RESTARTED</pre>
	DTM1253I	<p>This message was modified to include a reason why the JAL assigned SLM Control Center, Type could not be validated.</p> <pre>DTM1253I Job jobname held due to unknown SLM Control Center 'cc', Type 'tp', reason</pre>
	DTM4458I	<p>New message to specify that a job can not be processed as a Quick Job because either it is not SLM managed or the job is being managed by PCS.</p> <pre>DTM4458I "SLM SET QUICKJOB" Ignored. reason</pre>
	DTM7110I	<p>Expand function that provides the DCS Holder information to include TM/SE installations. Previously this function was only available to TM AE.</p> <pre>DTM7110I JOBjobnumber jobname IN DCS state (nnn) [Node CLAIMING LIMIT REACHED] REQ SERVICE DSNAME req service dsname Held xxx by name on system sysid</pre>
	DTM7127I	<p>New message to indicate that TM has been started without DCS in XCF mode.</p> <pre>DTM7127I TM/DCS IS RUNNING WITHOUT XCF SUPPORT ADD "DCS SET XCF(YES)" TO THE TMSS INIT PARMS</pre>
	DTM8161I	<p>Revised message will now indicate which limit was most responsible for the indicated Capacity Level being set.</p> <pre>DTM8161I memname AT CAPACITY LEVEL n: USAGE IS dddd</pre>
DTM8162I	<p>Changed meaning and reason for message. Now this message is only issued when exceeding Defined Capacity and/or LPAR Group limit.</p> <pre>DTM8162I memname HAS REACHED FULL CAPACITY</pre>	

PTF Level	MSG ID	Description
TMT7107	DTM8219I	<p>Updated response to /SLM D JESPLEX. It now displays the limits for each Defined Capacity, LPAR Group and LPAR Set for each member.</p> <p>DTM8219I SLM JESplex Status  Member: nnnn State: ssss  cpc-name Type: uuuu Serial: vv-vvvv  Logical Processors Active: aa Parked: pp  Capacity Management at yyyy.ddd hh:mm:ss Sync: s  xxxx z 4h Avg: bbbb Int: cccc Lmt: uuuu Cap: dd%  Avg jobs limited by Service Class. GS: kkk.k  PCS: mmm.m  Avg jobs limited by Service Class: tttt.t  gggg z 4h Avg: hhhh Int: iiii Lmt: uuuu Shr: jjjj  ssss z 4h Avg: qqqlnt: rrrrLmt: uuuu  Constraints:  General Services: Color(cccccc) CPU Inits Operator  Discretionary:Color(cccccc) Inits Operator</p>
	DTM8226I	<p>Message was modified to include Time, System and Reason in the text field of SLM Job Display.</p> <p>DTM8226I <i>Jjobnumber</i> is not managed by SLM  or  Job <i>jobname</i> is not managed by SLM  or  SLM Job Display  text</p>
	DTM8511I	<p>New message to indicate that the JESplex member is no longer at full capacity.</p> <p>memname IS NO LONGER AT FULL CAPACITY</p>
	DTM8512I	<p>New message to indicate that the SLM Policy being validated has PCS Groups defined but no PCS Service Classes configured.</p> <p>DTM8512I PCS Service Classes required for PCS Groups</p>
	DTM8513	<p>New informational message is issued when SLM first recognizes a PCS job and determines that it is to be treated as a Quick Job</p> <p>DTM8513 <i>jobname</i> (<i>jobid</i>) Quick Job: <i>criteria</i></p>
TMT7106	DTM8508I	<p>Revised message is the response to a SLM DISPLAY CPC command. Added limit for each LPAR Set plus an asterisk to the right of the LPAR Set name that indicates the one that (if any) that was used to calculate the Capacity Level.</p> <p>DTM8508I SLM CPC Status  MVSZ9 Type: 2096 Serial: 02-9DCD0  LPARs:  ETP1 4h Avg: 0.91 Intvl: 0.97  ETP2 4h Avg: 0.77 Intvl: 0.75  PROD1 4h Avg: 0.63 Intvl: 0.62  TEST1 4h Avg: 1.08 Intvl: 1.10  LPAR Sets  NONETP * 4h Avg: 2.65 Intvl: 2.57 Lmt: 5  ETPSET 4h Avg: 2.48 Intvl: 2.47 Lmt: 6  ETPSP1 4h Avg: 3.11 Intvl: 3.09 Lmt: 7</p>

PTF Level	MSG ID	Description
TMT7105	DTM0220I	<p>Response to TM JOB D command was modified. JES2-HELD operand as part of ThruPut Manager Summary Information now shows ALL the JES2 holds the same as JES2 would display:</p> <p>JES2-HOLD(ALL, JOB, HOLDUNTLL)</p> <p>DTM0220I jobnumber jobname jes2-queue class priority sys-aff ThruPut Manager Summary Information or TM INFORMATION NOT AVAILABLE</p>
	DTM6025I DTM6070I DTM6071I DTM6108I	<p>New messages are revised to reflect the support for the Control File in an XCF Coupling Facility using Notepad.</p> <p>DTM6025I XAM I/O ERROR</p> <p>jobname,stepname,devno,devtyp,ddname,op,err,bbcchhr,BSAM DTM6070I component initialization failed, XCF_Notepad DTM6071I IXCNOTE Request=request, Reqtype=reqtype failed, R15=rc, R0=rs, XCF_Notepad paused DTM6108I CONTROL FILE OPTIONS DSN=dsname ON volser MINDORM MAXDORM MINHOLD MAXHOLD RHOLD [XCF_NOTEPAD] nnnnnnnnnnnnnnnnnnstate [notestate] [NOTEPAD=notepadname] [DESCRIPTION=notepaddescription]</p>
	DTM8509I	<p>New message is the response to a SLM FALLBACK command when another instance of the command is executing on another member of the JESplex.</p> <p>SLM FALLBACK ignored - another is active in JESplex</p>
	DTM8510I	<p>New message to indicate that SLM FALLBACK serialization request has been failed by z/OS.</p> <p>SLM FALLBACK ENQ serialization failed. RC=retcode RS=reason</p>

PTF Level	MSG ID	Description
TMT7104	DTM1255I	<p>Revised message to include ON_DEMAND type</p> <p>DTM1255I Job jobname - held because of attempt to requeue to type Class which is set to None.</p>
	DTM1455I DTM1461I	<p>New messages were appended with JAL or DAL statement number when reason is "Failed by Job Action Language" or "Failed by Detail Action Language".</p> <p>DTM1455I date time Job jobname failed reason DTM1461I Job jobname failed reason</p>
	DTM3236E	<p>New message indicating that the response to TM CLASS command has timed out and the request is aborted.</p> <p>DTM3236E Class update request failed, JES2 is not responding. Retry the request later.</p>
	DTM3504I	<p>New message issued when the requeue class from JAL is invalid. The class is replaced with the JES2 default class.</p> <p>DTM3504I Invalid class xxx replaced by DEFAULT class yyy</p>
	DTM3774I	<p>Revised message to indicate that ThruPut Manger does not process jobs that have bypassed the Job Analyzer because they were submitted in a class with an XBM procedure.</p> <p>DTM3774I ThruPut Manager services bypassed, job submitted in XBM class</p>
	DTM7592I	<p>Revised message to indicate that the Volume Information File (VIF) is a mandatory file and should be allocated.</p> <p>DTM7592I Required 'FILE VIF' Statement missing</p>
	DTM8015W	<p>New message issued at ThruPut Manager start-up if an application requests an extended dataspace trace but the request fails.</p> <p>DTM8015W EXTENDED TRACE DATASPACE COULD NOT BE OBTAINED BY JES.</p>
	DTM8179I DTM8180E	<p>New messages to alert operations personnel that SLM has detected a significant system performance problem affecting job initiation.</p> <p>DTM8179I SLM has detected nnnn jobs with duplicate name job-name DTM8180E SLM detected job initiation delay. ASID=xxxx Job=jobid</p>

PTF Level	MSG ID	Description
TMT7104	DTM8219I	Revised message is the response to SLM DISPLAY JESPLEX command. The following information is added: <ul style="list-style-type: none"> <li>• CPC line</li> <li>• LPAR Set information</li> <li>• Indicator of which LPAR, LPAR Group or LPAR Set usage has been used to determine the Capacity Level for the member.</li> </ul>
	DTM8505I	New message to signal that the indicated CPC could not be detected by SLM in the JESplex. DTM8505I CPC not found in JESplex. Type:tttt Serial:ss-sssss
	DTM8506I	New message to indicate that the specified LPAR could not be found by SLM on the indicated CPC. DTM8506I LPAR nnnnnnnn not found for CPC tttt ss-sssss
	DTM8507I	New message to point that the indicated LPAR Set has been defined with one or more LPAR names that cannot be validated by SLM as either existing or z/OS eligible. DTM8507I LPAR Set nnnnnnnn has LPAR names that cannot be validated
	DTM8508I	New message is the response to a SLM DISPLAY CPC command. DTM8508I SLM CPC Status MVSZ9 Type: 2096 Serial: 02-9DCD0 LPARs: ETP1 4h Avg: 0.91 Intvl: 0.97 ETP2 4h Avg: 0.77 Intvl: 0.75 PROD1 4h Avg: 0.63 Intvl: 0.62 TEST1 4h Avg: 1.08 Intvl: 1.10

PTF Level	MSG ID	Description
TMT7103	DTM8407E	<p>New message for CA 7 R12 support.</p> <p>DTM8407E AMD Data Set is being either reinitialized or re-linked to a different CA 7/Job Database name. AMD Data Set: data set name</p>
	DTM8409E	<p>New message for CA 7 R12 support.</p> <p>DTM8409E AMD Data Set referenced from the Active BP has invalid format: data set name</p>
	DTM8410E	<p>New message for CA 7 R12 support.</p> <p>DTM8410E Error occurred during an attempt to read the AMD Data Set referenced from the Active BP: data set name</p>
	DTM8411E	<p>New message for CA 7 R12 support.</p> <p>DTM8411E AMD Data Set referenced from the Active BP File is intended to be used with CA 7 Instance / Database which is different from the one(s) the Control Region is working with. Control Region communicates with CA 7 inst name1 using Scheduler Job Data Set1/ CA 7 Logical Database1 database name1 AMD Data Set is intended to be used with CA 7 inst name2 using Scheduler Job Data Set2/ CA 7 Logical Database2 database name2</p>
	DTM8412E	<p>New message for CA 7 R12 support.</p> <p>DTM8412E AMD Data Set referenced from the Active BP is busy: data set name</p>
	DTM8413W	<p>New message for CA 7 R12 support.</p> <p>DTM8413W Cannot find valid version identification in user exit</p>
	DTM8414W	<p>New message for CA 7 R12 support.</p> <p>DTM8414W Incorrect version identification found in user exit</p>

PTF Level	MSG ID	Description
TMT7101 (GA Level)	All Messages	References to TM/XXX have been changed to XXX where XXX is one of DBS/DCS/JBS/JLS etc...
	DTM3233I	Response to TM CLASS DISPLAY command and now includes the default class introduced with 8-character job classes.  DTM3233I TM CLASS LIST Analysis..... 9 Deferred..... D,X Selectable... A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,R,S,T,U,V,W,X, Y,Z,0,1,2,3,4,5,6,7,8,9 Exempt..... Q On_Demand... None General Srvcs 1 Default..... None
	DTM3774I	DTM3774I ThruPut Manager services bypassed, job submitted in XBM class
	DTM4477I	DTM4477I SLM SET MANAGED(YES) IGNORED, JOB WAS REQUEUED TO DEMAND CLASS CLASS(X) PRIORITY(NN) NOT IN POLICY REQUEUE CLASS IS _
	DTM6563I	DTM6563I TM LEVEL DISPLAY SYSNAME=PROD2 JES2 NODE=MARKHAM SYS=P2 TM SE/AE V7R1.0 AT PTF TMT7101, z/OS R2.1.0, JES2 z/OS 2.1 APAR(S) APPLIED: TR71nnn
	DTM7272I	DTM7272I Diagnostic trace for XCF services subtask was spun to ddname ddname
	DTM8177E	DTM8177E SLM on aaaa has detected incomplete handshake with SLM on bbbb
	DTM8178I	DTM8178I SLM on aaaa attempting resync with SLM Server
	DTM8233I	Add address space count to SLM D SC command
	DTM8219I	Add display # of address spaces limited by service class to SLM D JESPLEX command
DTM8220I	Add ACM Jobs constraint to display to SLM D SG command	

## New/Revised Utility

The updates are organized by relevance to each of ThruPut Manager editions. The changes listed below only apply to ThruPut Manager PCS.

## ThruPut Manager PCS

PTF Level	Utility	Description
TMT7103	DTM4CST7	<p>A new DTMCA7R DD is required for the Data Collection Utility and should be used all the time when the Utility is running. This DD is a CA 7 response compact log which will provide significant analysis assistance should it be needed.</p> <p><b>JCL changes</b></p> <p>An additional DD statement should be added to the step executing DTM4CST7:</p> <pre>//DTMCA7R DD SYSOUT=*</pre> <p><b>Parms-</b></p> <p>NOLOG - will turn this feature off  LOG=n – will change the default number of lines printed for each entry from 10 to 'n'.  n can be a number from 1 to 999.  LOG= and NOLOG parameters cannot be used together</p> <p><b>Additional optional DD statement:</b></p> <pre>//\$TMX2WP DD SYSOUT=*</pre> <ul style="list-style-type: none"> <li>• produces full result output</li> <li>• only added to the JCL when requested by MVS Solutions support</li> <li>• DTMCA7R DD and \$\$TMX2WP DD are mutually exclusive</li> <li>• DTMCA7 DD will take precedence if NOLOG is not coded on its DD</li> </ul>

## New/Revised Commands

PTF Level	Command	Description
TMT7116	JLS BACKUP	New command that provides the facility for backing up all the current limiting agents
	JLS RESTORE	New command that restores agents that were backed up using the JLS BACKUP command.
TMT7115	SLM D MUTIPLX LONG	Command updated to display CMP information across a Multiplex.



TMT7114	JAL DISPLAY	Command updated to allow the a request to display any Secondary JAL that has been loaded.
	JAL REFRESH	Command updated to include the ability to Refresh/Load a Secondary JAL.
TMT7109	SLM FALLBACK	Command was updated to change "PCS" keywords to "PRODUCTION".
	TM CLASS	Command was updated to change "PCS" keywords to "PRODUCTION_SERVICES".
	SLM SELECT	Command was updated to change "PCS" keywords to "PRODUCTION".
TMT7108	SLM SELECT	The new keyword QUICKONLY was added to request that only Quick Jobs can be selected for General Services or Production Services or both.

PTF Level	Command	Description
TMT7104	TM CLASS	The new keyword LONG was added to display the actual Selectable or Exempt classes.
	TM DISPLAY CPC	<p>New command that displays information about the local CPC.</p> <pre>DTM8508I SLM CPC Status CPC          Type: 1090  Serial: 02-0DACB</pre> <p>If the CPC was configured in the active SLM Policy, the installation provided name is shown.</p> <p>If LPARs and/ or LPAR Sets are configured in the active SLM Policy, each valid LPAR/LPAR Set is listed, together with its current 4 hour average of CPU usage in MSUs/hr and the CPU usage in the last 5 minute interval in MSUs/hr as calculated by SLM.</p> <pre>DTM8508I SLM CPC Status MVSZ9      Type: 2096  Serial: 02-9DCD0 LPARs: ETP1       4h Avg: 0.91      Intvl: 0.97 ETP2       4h Avg: 0.77      Intvl: 0.75 ETP3       4h Avg: 0.80      Intvl: 0.75 PROD1      4h Avg: 0.63      Intvl: 0.62 TEST1      4h Avg: 1.08      Intvl: 1.10 TEST2      4h Avg: 0.94      Intvl: 0.85 LPAR Sets NONETP     4h Avg: 2.65      Intvl: 2.57 ETPSET     4h Avg: 2.48      Intvl: 2.47 ETPSP1     4h Avg: 3.11      Intvl: 3.09</pre>
TMT7101 (GA Level)	TM OPTIONS	No longer shows ACF2
	TM CUSTOM DISPLAY	<p>Add the Option Description to output message:</p> <pre>/TM CUSTOM ENABLE(UM0001) DTM1156I TM CUSTOM DISPLAY FUNCTION  STATUS  DESCRIPTION UM0002   ENABLED  Generate JVLs even if NO tape volumes</pre>

## New/Revised DAL/JAL

PTF Level	Descriptor	Description
TMT7117	SLM SET CAPACITY_LEVEL	Withdrawn
TMT7115	\$RACFU \$NOTIFY \$TSSUSER	Documentation corrected to reflect a maximum of 8 characters.
TMT7113	\$SMF30....	These descriptors may be used in STEP/ JOB Term DAL to create messages ala IEFACRT

PTF Level	Descriptor	Description
TMT7112	\$XDBS_HOLD_UNAVAILABLE_UNITS \$XJBS_HOLD_UNDEFINED_AGENTS \$XJBS_HOLD_UNDEFINED_ENVIRONMENT	These descriptors have been deleted.
	\$JCL_MODELDSN	New DAL character descriptor that supports DCB=dsname coded in the JCL
	\$JCLNOTIFY_EMAIL_n	New JAL descriptor related to email address(es) extracted from Job Card.
	\$JCL_JOB_EMAIL	New JAL descriptor that allows the installation to extract an email address coded on the JOB statement
TMT7109	SLM SERVICE	Keyword PRODUCTION PROFILE is changed to PRODUCTION GROUP.
TMT7107	SLM SET QUICKJOB	New JAL statement to identify Quick Job.

	\$JCL_JOB_DSENQSHR \$JCL_JOB_REGIONX_ABOVE \$JCL_JOB_REGIONX_BELOW \$JCL_JOB_SYSAFF \$JCL_JOB_SYSTEM \$JCL_JOB_UJOBCCORR	The descriptor name was changed from \$JCL_JOBCCARD... to \$JCL_JOB... The descriptor definitions remain the same.
TMT7106	\$JCL_JOBCCARD_REGIONX_ABOVE \$JCL_JOBCCARD_REGIONX_BELOW \$JCL_EXEC_REGIONX_ABOVE \$JCL_EXEC_REGIONX_BELOW)	DAL/JAL descriptors added to support REGIONX.
	\$DAL_TEXT_DSNAME \$JAL_TEXT_DSNAME	DAL/JAL descriptors that allow to display internal dsname text.
	\$ENABLED	DAL/JAL descriptor added to recognize whether an application is active or not. Example: EVAL JBS_DISABLED (~\$ENABLED(JBS))
TMT7105	\$JCL_SCHEDULE_JOBGROUP \$JCL_SCHEDULE_BEFORE \$JCL_SCHEDULE_AFTER \$JCL_SCHEDULE_WITH \$JCL_SCHEDULE_HOLDUNTIL \$JCL_SCHEDULE_STARTBY	JAL descriptors added to recognize the presence and content of new z/OS 2.2 SCHEDULE JCL keywords.
	\$CONTROL_M(YES/NO)	DAL/JAL logic descriptor added to recognize jobs submitted by Control-M.

PTF Level	Descriptor	Description
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TMT7104	SET MEMLIMIT	New JAL action statement that sets value for the MEMLIMIT parameter.
	\$ORIGINAL_INSYSID	New JAL character string descriptor that allows user to determine the original SYSID if the job came from another node.
	\$INDEVICE	This descriptor was updated to provide ability to recognize jobs submitted by a TSO user.  Example: EVAL TSO_SUBMIT (\$INDEV(TSO))
TMT7101 (GA Level)	See z/OS Supplement	
	\$JTS_HOLD	It is a descriptor that reflects the difference between the time specified on the JTS JECL  //*JTS HOLD_UNTIL statement and the current time.
	\$DJC_GROUP \$DJC_CLOSE \$DJC_CLOSE_TIME \$DJC_GROUP \$DJC_HISTORY_COUNT \$DJC_HISTORY_DAYS \$DJC_HOLD \$DJC_RELSCHCT	These descriptors collectively provide support for adding jobs to a group that can be processed by Dependent Job Services
	\$JECL_verb	It is a logic descriptor which allows you to determine if a specific JECL statement (of over seventy possibilities) is included in the JCL.
	\$JCL_JOB CARD_UJOB CORR	It is a descriptor that reflects the value of the job card UJOB CORR keyword.

# Maintenance Fixes

The problems' descriptions and corrective fixes are accumulated in a problem database that can be searched by PTF Level and the MVS Solutions Problem Number.

## Maintenance Fixes by PTF

To obtain a list of problems that are corrected by any one individual PTF package, please contact us via the Customer Support Website (<https://go.compuware.com>)

## APARs Superseded by PTF

The following chart outlines, by PTF Level, the APAR numbers that have been permanently corrected by the corresponding PTF maintenance.

PTF Level	APARs Addressed by PTF Level
TMT7118	TR71384 TR71385 TR71386 TR71387 TR71388 TR71389 TR71390 TR71391 TR71392 TR71393 TR71394
TMT7117	TR71364 TR71365 TR71367 TR71368 TR71369 TR71370 TR71371 TR71372 TR71373 TR71374 TR71375 TR71376 TR71377 TR71378 TR71379 TR71381
TMT7116	TR71337 TR71338 TR71353 TR71354 TR71355 TR71356 TR71357 TR71340 TR71341 TR71342 TR71343 TR71344 TR71345 TR71346 TR71347 TR71348 TR71349 TR71350 TR71351 TR71352 TR71353 TR71354 TR71355 TR71356 TR71357
TMT7115	TR71298 TR71300 TR71301 TR71302 TR71303 TR71304 TR71305 TR71306 TR71307 TR71308 TR71309 TR71310 TR71311 TR71312 TR71313 TR71314 TR71315 TR71316 TR71317 TR71318 TR71319 TR71320 TR71321 TR71322 TR71323 TR71324 TR71325 TR71236 TR71327 TR71328 TR71329 TR71330 TR71331 TR71332 TR71333 TR71334 TR71335 TR71336  Note: TMT7115 supersedes TR71312 only if custom option UM0046 is enabled on the TMT7115 system(s). DO NOT enable this customization option if your JAL is not making use of JBS SET SYSAFF(BIND) function to requeue jobs to the converter of the system where the binding agent is active.  If UM0046 is enabled, it should be disabled once all systems in the JESplex are running the TMT7115 level.  See Problem entry PR18027 for details on this issue.
TMT7114	TR71276 TR71277 TR71278 TR71279 TR71280 TR71281 TR71282 TR71284 TR71285 TR71286 TR71287 TR71288 TR71289 TR71290 TR71291 TR71292 TR71293 TR71294 TR71295 TR71296
TMT7113	TR71270 TR71272
TMT7112	TR71264 TR71266 TR71267
TMT7110	TR71214 TR71216 TR71217 TR71222 TR71223 TR71225 TR71228 TR71229 TR71230 TR71233 TR71234 TR71235 TR71236 TR71237 TR71238 TR71239 TR71240 TR71242 TR71241 TR71243 TR71244 TR71245 TR71246 TR71247 TR71248 TR71249 TR71250 TR71251 TR71252 TR71253 TR71254 TR71255 TR71257 TR71258 TR71259 TR71260 TR71261 TR71262 TR71263
TMT7109	TR71203 TR71204 TR71205 TR71206 TR71215 TR71218 TR71224 TR71227 TR71231

TMT7108	TR71166 TR71167 TR71169 TR71170 TR71171 TR71174 TR71175 TR71176 TR71177 TR71178 TR71179 TR71180 TR71181 TR71182 TR71183 TR71184 TR71185 TR71186 TR71187 TR71188 TR71189 TR71190 TR71191 TR71192 TR71194 TR71195 TR71196 TR71197 TR71200 TR71202 TR71208 TR71209 TR71210 TR71211 TR71212
TMT7107	TR71095 TR71096 TR71100 TR71118 TR71119 TR71120 TR71121 TR71122 TR71123 TR71124 TR71125 TR71127 TR71128 TR71129 TR71130 TR71131 TR71132 TR71133 TR71134 TR71135 TR71136 TR71137 TR71141 TR71142 TR71143 TR71144 TR71145 TR71146 TR71148 TR71149 TR71150 TR71151 TR71152 TR71153 TR71155 TR71156 TR71158 TR71159 TR71160 TR71161 TR71162 TR71163 TR71164
TMT7106	TR71101
TMT7105	TR71058 TR71059 TR71060 TR71063 TR71064 TR71065 TR71066 TR71067 TR71069 TR71070 TR71071 TR71072 TR71074 TR71075 TR71076 TR71077 TR71078 TR71079 TR71081 TR71082 TR71084 TR71085 TR71086 TR71087 TR71090 TR71103 TR71109
TMT7104	TR71004 TR71006 TR71007 TR71011 TR71012 TR71015 TR71016 TR71017 TR71018 TR71020 TR71021 TR71024 TR71025 TR71026 TR71027 TR71028 TR71031 TR71032 TR71034 TR71035 TR71036 TR71037 TR71039 TR71040 TR71041 TR71042 TR71043 TR71044 TR71045 TR71046 TR71047 TR71048 TR71049 TR71050 TR71051 TR71052 TR71054 TR71056 TR71057 TR71058
TMT7103	TR71023 TR71030 TR71038
TMT7102	TR71005 TR71013 TR71014 TR71019 TR71022
TMT7101	TR71002 TR71003

# Summary of Manual Updates

## PTF TMT7118

The documentation release TM1802-7118 reflects ThruPut Manager release TMT71118 and includes following updates:

- *Automated Capacity Management Guide, Messages Guide, TM AE Usage Guide, and Installation Guide* manuals were updated to reflect release respective changes.

## PTF TMT7117

The documentation release TM1802-7117 reflects ThruPut Manager release TMT71117 and includes following updates:

- *Automated Capacity Management Guide, Messages Guide, and Installation Guide* manuals were updated to reflect release respective changes.

## PTF TMT7116

The documentation release TM1802-7116 reflects ThruPut Manager release TMT71116 and includes following updates:

- *AE PCS Installation Companion Guide, Automated Capacity Management Guide, TM AE Usage Guide, ThruPut Manager Base Product System Programming Guide, Messages Guide, Command Reference Guide, and Installation Guide* manuals were updated to reflect release respective changes.

## PTF TMT7115

The documentation release TM1802-7115 reflects ThruPut Manager release TMT71115 and includes following updates:

- *PCS Concepts, PCS Usage, AE PCS Installation Companion Guide, ThruPut Manager Base Product System Programming Guide, Messages Guide, JAL Reference Guide, Automated Capacity Management Guide, and Command Reference Guide* manuals were updated to reflect release respective changes.

## PTF TMT7114

The documentation release TM1802-7114 reflects ThruPut Manager release TMT71114 and includes following updates:

- *Messages manual, JES3 Compatibility Services Guide, Installation Guide, JES Compatibility Services Guide, and z/OS 2.n Supplement* manuals were updated to reflect release respective changes.

## PTF TMT7113

The documentation release TM1802-7113 reflects ThruPut Manager release TMT71113 and includes following updates:

- *Installation Guide, Base Product System Programming Guide, Command Reference Guide, DAL/JAL User Guide, z/OS 2.n Supplement, Automated Capacity Management Guide, and Messages* manuals were updated to reflect release respective changes.

## PTF TMT7112

The documentation release TM1802-7112 reflects ThruPut Manager release TMT71102 and includes following updates:

- *Installation Guide, Base Product System Programming Guide, DAL Reference Guide, JAL Reference Guide, JECL Reference Guide, and Messages* manuals were updated to reflect release respective changes.

## PTF TMT7111

No changes.

## PTF TMT7110

The documentation release TM1802-7110 reflects ThruPut Manager release TMT7110 and includes following updates:

- *Installation Guide, DAL/JAL User Guide, Base Product System Programming Guide, Production Services Supplement, and Messages* manuals were updated to reflect release respective changes

## PTF TMT7109

The documentation release TMV7R1-7109 reflects ThruPut Manager release TMT7109 and includes following updates:

- *Production Services Supplement* is added to the documentation set.
- *JAL Reference Guide, Command Reference Guide, and Message* manuals were updated to reflect release respective changes.

## PTF TMT7107

The documentation release TMV7R1-7107 reflects ThruPut Manager release TMT7107 and includes following updates:

- Sections describing Quick Jobs added to the *TM AE Concepts Guide*.
- *JAL Reference Guide, DAL Reference Guide, and Message* manuals were updated to reflect release respective changes.

## PTF TMT7106

The documentation release TMV7R1-7106 reflects ThruPut Manager release TMT7106 and includes following updates:

- Sections describing LPAR Sets and TM AE coexistence with 3rd party capping products added to the *ACM Guide*.
- Comparison between JES2 Job Execution Control (JEC) and ThruPut Manager Dependent Job Control (DJC) and deadline scheduling capabilities added to the *z/OS 2.n Supplement*.
- Appendix B: JES2 Job Execution Control Comparison added to the *UCS User Guide*.



## PTF TMT7104

The documentation release TMV7R1-7104 reflects ThruPut Manager release TMT7104 and includes following updates:

- Index added to *Installation Guide*
- Figures removed and example simplified in the *ACM Guide*

## PTF TMT7101

The set of manuals have been re-organized and some have been re-written for Release 7.1. The set relevant for each edition is listed below. All manuals are available for download from [www.mvssol.com](http://www.mvssol.com).

## ThruPut Manager AE Manuals

### Installation

The *Installation Guide* merges the *Installer's Guide* and the *SPG: Installation and Maintenance* and incorporates material from other manuals. It reflects the streamlined installation procedures now in use. Release Details merges PTF Details and Release Notes.

### Essentials

These manuals describe the TM AE features that deliver throughput improvements and automation benefits, and that are applicable to any datacenter. They are new and replace the *Automation Edition Supplement*:

- *ThruPut Manager AE Concepts Guide*
- *ThruPut Manager AE Usage Guide*

### Electives

Elective features bring many additional benefits. They are mostly independent of one another, though they all build on the essential implementation. The manuals to describe them are:

- *Automated Capacity Management Guide*
- *Base Product: System Programming Guide*
- *Drive Booking Services: System Programming Guide*
- *Dataset Contention Services: System Programming Guide*
- *Job Binding Services: System Programming Guide*
- *User Control Services: System Programming Guide*
- *Exits: System Programming Guide*
- *Virtual Volume Staging (VVS) Supplement*
- *JES3 Compatibility Services Guide*

### Reference

The *Messages*, *DAL/JAL User Guide*, *JAL Reference Guide*, and *DAL Reference Guide* manuals have been converted from their previous format and their organization remains the same. The new *Command Reference Guide* is an extract from the previous *Operating Guide*, and lists all the commands in alphabetical order. The new *JECL Reference Guide* is a list of JECL statements, in alphabetical order (and an extract from the *Base Product: System Programming Guide*). Thus, the current list of reference manuals is:

- *z/OS 2.1 Supplement*
- *JAL Reference Guide*
- *DAL Reference Guide*
- *DAL/JAL User Guide*
- *JECL Reference Guide*
- *Command Reference Guide*

- *Messages*

## User-focused

These manuals are intended for the users of ThruPut Manager, such as submitters of jobs.

- *User Control Services User Guide*

## ThruPut Manager SE Manuals

### Installation

The *Installation Guide* replaces *SPG: Installation and Maintenance* and incorporates material from other manuals. It reflects the streamlined installation procedures now in use. Release Details replaces PTF Details.

### Functional Guides

This set of manuals explains how to implement TM SE features.

- *Base Product: System Programming Guide*
- *Dataset Contention Services: System Programming Guide*
- *Job Binding Services: System Programming Guide*
- *User Control Services: System Programming Guide*
- *Exits: System Programming Guide*
- *Virtual Volume Staging (VVS) Supplement*
- *JES3 Compatibility Services Guide*

### Reference

The *Messages*, *DAL/JAL User Guide*, *JAL Reference Guide*, and *DAL Reference Guide* manuals have been converted from their previous format, and their organization remains the same. The new *Command Reference Guide* is an extract of the previous *Operating Guide*, and lists all the commands in alphabetical order. The new *JECL Reference Guide* is a list of JECL statements, in alphabetical order (and an extract from the *Base Product: System Programming Guide*). Thus, the current list of reference manuals is:

- *z/OS 2.1 Supplement*
- *JAL Reference Guide*
- *DAL Reference Guide*
- *DAL/JAL User Guide*
- *JECL Reference Guide*
- *Command Reference Guide*
- *Messages*

## User-focused

These manuals are intended for the users of ThruPut Manager, such as submitters of jobs.

- *User Control Services User Guide*

## ThruPut Manager Production Control Services (PCS) Manuals

### Installation

The AE PCS Installation Guide Companion provides additional instructions to install and implement Production Control Services.

### Essentials

These manuals describe Production Control Services (PCS) features that deliver throughput improvements and automation benefits for Installations that make use of CA 7.

- *PCS Concepts Guide*

- PCS Usage Guide

