

What's new/changed in GDPS 3.10?

IBM has announced on March 26, 2013, GDPS/PPRC, GDPS/PPRC HyperSwap Manager, GDPS/XRC and GDPS/GM Version 3 Release 10 with Generally Availability on March 29, 2013.

This document describes:

- ▶ New function and changes in GDPS® V3.10, plus information on GDPS options that are planned to be discontinued in a future release.
- ▶ New function added to GDPS V3.9 via Small Programming Enhancement (SPE) APARs.
- ▶ New GDPS tools.
- ▶ GDPS Statement of Direction.
- ▶ End of support information for GDPS prerequisite products.

What's new or changed in GDPS/PPRC 3.10

- ▶ GDPS adds new function to check whether each primary/secondary CKD¹ device pair in the GEOPARM configuration are the same size. A new *FAILONSIZE MISMATCH* option is provided in GEOPLEX OPTIONS to fail any configuration changes that would introduce new pairs with a size mismatch. This new checking is intended to prevent mismatched pairs from being inadvertently introduced into the configuration and provides operations staff with early awareness of any changes that do result in mismatched pairs after the devices are added to the GDPS configuration.
 - A new option, *Alter Configuration Options*, is added to the Config management panel which allows changing the *FAILONSIZE MISMATCH* setting without requiring a System Automation Policy Database update, build, ACF refresh process.
 - Additionally, scripts that contain specific **DASD** script statements are disabled when mismatched pairs do exist.
 - The GDPS Query Services **ENVIRONMENT** query is extended to return new messages associated with device size checking.
- ▶ Support is introduced to GDPS to take a *consistent* FlashCopy® exploiting the FlashCopy Freeze function of the disk subsystem, avoiding the need to perform a PPRC Freeze to generate a set of consistent secondary devices. This support, available with a new *CONSISTENT* operand on the **DASD FCESTABLISH** script statement can be used in conjunction with COPY, NOCOPY and INCREMENTAL options and can also be used to create a consistent FlashCopy of your primary devices.
 - A new *FC TIMEOUT* specification is available in GEOPLEX OPTIONS which allows you to limit the FlashCopy Freeze impact. GDPS monitors the FlashCopy operation and if this timeout limit is exceeded, GDPS aborts the action in order to avoid excessive impact to production applications.
- ▶ New panels are introduced, simplifying the task of managing GDPS Health Checks. The panels allow performing tasks such as viewing health check status, activating/deactivating checks, running checks and reviewing check results and so on. Using this interface removes the requirement for GDPS staff to use the SDSF interface for viewing GDPS check results.
- ▶ It is now possible, in conjunction with new function added in System Automation V3.4 (with APAR), to remove deleted GDPS scripts without requiring NetView® to be recycled.
- ▶ GDPS is able to exploit the dynamic SDF panel capability introduced in System Automation V3.4 simplifying the SDF setup tasks and improving SDF panel usage
- ▶ The following GDPS Health Checks are new or enhanced:
 - **GDPS_Check_GRS** is extended to raise an exception if the GRS Contention Notification System (CNS) role is found to be active on a GDPS Controlling system (unless no candidate systems are available). The check also returns a recommended list of systems that the CNS role can be moved to.
 - **GDPS_Check_CONFIG** is modified to provide a **GEOHCP00** parameter to allow you to override the recommended number of **REXX™** environments based on your understanding of your environment.
 - **GDPS_Check_DEVICE** introduced via 3.9 SPE and described in “GDPS/PPRC 3.9 SPEs” on page 4 is enhanced.
 - The check is extended to run on production systems in order to identify volumes online to production systems which are not included in the GDPS-managed configuration.

¹ At this time checking is not performed for FB volumes

- The check on Controlling systems allows a new GEOHCP00 override to check those devices *online and allocated* in the system rather than the default of online devices.
- GDPS_Check_LOGR is added to check that CICS® logstreams are either unconditionally duplexed to GDPS-managed PPRCed disks or are specified as DASDONLY and reside on GDPS-managed PPRCed disks in order to ensure that a copy of the logstream data will be available in the recovery site.
- GDPS_Check_XCF is updated:
 - A new GEOHCP00 parameter override is available to allow disabling the check for CRITICALPAGNG on the GDPS Controlling systems.
 - The XCF Transport Class checking raises an exception if dedicated XCF transport classes are still being used for GDPS signalling if the GDPS environment supports dedicated XCF buffers for HyperSwap™ signalling.
- ▶ The default for the CCTERM operand on the **DASD START SECONDARY** script statement is changed to *COND* from the previous default of NO. This means that GDPS will perform cleanup of orphaned Concurrent Copy sessions on former primary, new secondary disks when resynchronizing the PPRC mirror, avoiding any resync/failback issues caused by orphans, even if you have not coded the CCTERM operand on the script statement .
- ▶ The GDPS management capability for the IBM Virtualization Engine TS7700 is extended to provide support for the Bulk Volume Information Retrieval (BVIR) function provided by the TS7700 in order to report on “in-doubt” tapes in a library. The “in-doubt” tape information can be especially useful in a recovery situation in order to determine whether special recovery action is required (such as re-running some batch jobs or job steps) in light of any “in-doubt” tapes in the recovery site library.
 - GDPS autonomically drives BVIR processing to collect in-doubt tape information from all libraries in a grid if tape replication for any library in the grid is detected to be disabled outside of GDPS control.
 - The TS7700 panels are extended to support
 - Initiating BVIR processing against any GDPS-managed library as well as to review the latest “in-doubt” tape report.
 - Viewing the latest BVIR report for any given library and optionally writing out the report to the NetView log.
- ▶ GDPS adds support for Live Guest Relocation (LGR) of Linux® guests² of xDR-managed z/VM® systems in a Single System Image (SSI) cluster. LGR allows Linux guests to be moved from one z/VM system in the cluster to another, transparently. LGR support complements and enhances GDPS continuous availability characteristics. z/VM system maintenance can be performed non-disruptive to re-locatable guests. Combined with HyperSwap, entire site maintenance can be performed with no disruption to the re-locatable guests of z/VM. The following new capabilities are added to GDPS:
 - New panels to perform Live Guest Relocation.
 - A new **SSIRELOC** script statement to perform Live Guest Relocation.
 - The GDPS **STOP** Standard Action, when executed using the panels, issues a prompt if there are re-locatable guests still running on the selected system and facilitates moving any such guests if desired. The prompt prevents accidental shutdown of guests that were inadvertently not moved prior to stopping a z/VM system.

² xDR capability to move guest Linux systems with LGR is not supported for Linux guests that are managed by System Automation for Multiplatform with the xDR feature installed (also known as “managed Linux guests”).

- ▶ GDPS xDR z/VM Guest, in dual proxy environments, now supports locking the storage for both proxies. This ensures that the storage for both proxy guests will always be locked and GDPS will not be impacted by a proxy switch that occurs when the system is storage constrained.
 - The option of locking the storage for only the master proxy and letting GDPS unlock/lock storage for the appropriate proxy during proxy switches remains supported; however, GDPS 3.10 is the last release to support locking storage in only a single proxy. You must update your proxy setup to lock storage for both proxies for future compatibility.
- ▶ The PROCOPTS=INTERNAL2 specification in GEOPLEX OPTIONS is enhanced:
 - It is now possible to specify the *type of systems* for which INTERNAL2 should be in effect. GDPS introduces the option to NIP/IPL WTORs on only GDPS z/OS® systems and/or only on xDR z/VM systems.
 - GDPS now replies to the IEA213A, duplicate volume serial prompt only if the two devices on the prompt constitute a primary/secondary pair managed by GDPS.
 - The GDPS Query Services **ENVIRONMENT** query is extended to return information on the effective PROCOPTS setting.
- ▶ The minimum Central Storage recommendation for Controlling systems has been increased to 1 GB.
- ▶ The GDPS-recommended sample MSGFLDxx member for Message Flood Automation (MFA) is updated to change the attribute of the XCFAS job from NODISPLAY to DISPLAY for *REGULAR* messages.
- ▶ GDPS 3.10 is the last release to allow specification of the **SYSPLEX CFRECOVER** script statement *without* a SITE_n target site indicator. You must add the SITE_n indicator to any **SYSPLEX CFRECOVER** statements in your scripts to ensure future compatibility.
- ▶ GDPS 3.10 is the last release to support the original FREEZE policy specification in GEOPLEX OPTIONS. The PPRCFAILURE and PRIMARYFAILURE policy options, first available with a GDPS 3.7 SPE, provide more flexible freeze and swap policy options as well as enabling the Enhanced Freeze&Stop Conditional processing. PPRCFAILURE and PRIMARYFAILURE will remain as the only supported options in the next release after GDPS 3.10. You must start using the PPRCFAILURE/PRIMARYFAILURE options to ensure future compatibility.

GDPS/PPRC 3.9 SPEs

- ▶ A new GDPS Health Check, GDPS_Check_DEVICE is added. This check raises an exception if the disks that a Controlling system is using are found not to reside on a disk subsystem that is in the same site that the Controlling system is running in. It is essential that a Controlling system uses local disks in order to survive a failure event in the opposite site.
- ▶ The **SYSPLEX CFRECOVER** script statement is enhanced to include a SITE_n operand to explicitly specify the target site for moving structures to during CFRECOVER processing. Explicitly specifying the target site eliminates problems that can stem from performing CF actions outside of GDPS control as well as problems with certain configurations/scenarios.
- ▶ The GDPS-recommended sample MSGFLDxx member for Message Flood Automation (MFA) is updated to change the attribute of the XCFAS job from NODISPLAY to DISPLAY for *ACTION* messages.

New GDPS Tools for GDPS/PPRC

- ▶ The *GDPS Distributed System Hardware Management Tool* allows you to perform BCP Internal Interface-like hardware actions against servers and virtual machines on a number

of different platforms. It complements the GDPS heterogeneous capabilities of GDPS such as Distributed Cluster Management, extending the end-to-end reach of GDPS to distributed server platform hardware.

- ▶ The *GDPS Configuration Assistant (GeoAssitant)* tool helps you to manage the GEOPARM file, allowing you to create a graphical view of your GEOPARM which can be easily shared and displayed on a variety of devices (such as workstations, tablets, smart phones and so on). It can analyze and extract various statistics about your configuration. GeoAssistant can also provide step by step guidance for coding the GEOPARM statements when adding new devices to an existing configuration.

What's new or changed in GDPS/HM 3.10

- ▶ GDPS adds new function to check whether each primary/secondary CKD³ device pair in the GEOPARM configuration are the same size. A new *FAILONSIZE MISMATCH* option is provided in GEOPLEX OPTIONS to fail any configuration changes that would introduce new pairs with a size mismatch. This new checking is intended to prevent mismatched pairs from being inadvertently introduced into the configuration and provides operations staff with early awareness of any changes that do result in mismatched pairs after the devices are added to the GDPS configuration.
 - A new option, *Alter Configuration Options*, is added to the Config management panel which allows changing the FAILONSIZE MISMATCH setting without requiring a System Automation Policy Data Base update, build, ACF refresh process.
 - Additionally, scripts that contain specific DASD script statements are disabled when mismatched pairs do exist.
 - The GDPS Query Services **ENVIRONMENT** query is extended to return new messages associated with device size checking.
- ▶ Support is introduced to GDPS to take a *consistent* FlashCopy exploiting the FlashCopy Freeze function of the disk subsystem, avoiding the need to perform a PPRC Freeze to generate a set of consistent secondary devices. This support, available with a new *CONSISTENT* operand on the **FLSHCOPY** command can be used in conjunction with COPY, NOCOPY and INCREMENTAL options.
 - A new *FC TIMEOUT* specification is available in GEOPLEX OPTIONS which allows you to limit the FlashCopy Freeze impact. GDPS monitors the FlashCopy operation and if this timeout limit is exceeded, GDPS aborts the action.
- ▶ New panels are introduced, simplifying the task of managing GDPS Health Checks. The panels allow performing tasks such as viewing health check status, activating/deactivating checks, running checks and reviewing check results and so on. Using this interface removes the requirement for GDPS staff to use the SDSF interface for viewing GDPS check results.
- ▶ It is now possible, in conjunction with new function added in System Automation V3.4 (with APAR), to remove deleted GDPS scripts without requiring NetView to be recycled.
- ▶ The following GDPS Health Checks are new or enhanced:
 - GDPS_Check_GRS is extended to raise an exception if the GRS Contention Notification System (CNS) role is found to be active on a GDPS Controlling system (unless no candidate systems are available). The check also returns a recommended list of systems that the CNS role can be moved to.
 - GDPS_Check_CONFIG is extended to allow a GEOHCP00 parameter to allow you to override the recommended number of REXX environments based on your understanding of your environment.
 - GDPS_Check_DEVICE introduced via 3.9 SPE and described in “GDPS/HM 3.9 SPEs” on page 7 is enhanced.
 - The check is extended to run on production systems in order to identify volumes online to production systems which are not included in the GDPS-managed configuration.
 - The check on Controlling systems allows a new GEOHCP00 override to check those devices *online and allocated* in the system rather than the default of online devices.

³ At this time checking is not performed for FB volumes

- GDPS_Check_LOGR is introduced to check that CICS logstreams are either unconditionally duplexed to GDPS-managed PPRC disks or are specified as DASDONLY and reside on GDPS-managed PPRC disks in order to ensure that a copy of the logstream data will be available in the recovery site.
- GDPS_Check_XCF is updated:
 - A new GEOHCP00 parameter override is available to disable the check for CRITICALPAGNG on the GDPS Controlling systems.
 - The XCF Transport Class checking raises an exception if dedicated XCF transport classes are still being used for GDPS signalling in a GDPS environment that supports dedicated XCF buffers for HyperSwap signalling.
- ▶ The default for the CCTERM operand on the **HYPERSW RESTORE** command is changed to *COND* from the previous default of *NO*. This means that GDPS will perform cleanup of orphaned Concurrent Copy sessions on former primary, new secondary disks when resynchronizing the PPRC mirror, avoiding any resync/failback issues caused by orphans, even if you have not coded the CCTERM operand on the command.
- ▶ The minimum Central Storage recommendation for Controlling systems has been increased to 1 GB.
- ▶ The GDPS-recommended sample MSGFLDxx member for Message Flood Automation (MFA) is updated to change the attribute of the XCFAS job from *NODISPLAY* to *DISPLAY* for *REGULAR* messages.
- ▶ GDPS 3.10 is the last release to support the original *FREEZE* policy specification in *GEOPLEX OPTIONS*. The *PPRCFAILURE* and *PRIMARYFAILURE* policy options, first available with a GDPS 3.7 SPE, provide more flexible freeze and swap policy options as well as enabling the Enhanced Freeze&Stop Conditional processing. *PPRCFAILURE* and *PRIMARYFAILURE* will remain as the only supported options in the next release after GDPS 3.10. You must start using the *PPRCFAILURE/PRIMARYFAILURE* options to ensure future compatibility.

GDPS/HM 3.9 SPEs

- ▶ A new GDPS Health Check, *GDPS_Check_DEVICE* is added. This check raises an exception if the disks that a Controlling system is using are found not to reside on a disk subsystem that is in the same site that the Controlling system is running in. It is essential that a Controlling system uses local disks in order to survive a failure event in the opposite site.
- ▶ The GDPS-recommended sample MSGFLDxx member for Message Flood Automation (MFA) is updated to change the attribute of the XCFAS job from *NODISPLAY* to *DISPLAY* for *ACTION* messages.

New GDPS Tools for GDPS/HM

- ▶ The *GDPS Configuration Assistant (GeoAssitant)* tool helps you to manage the *GEOPARM* file, allowing you to create a graphical view of your *GEOPARM* which can be easily shared and displayed on a variety of devices (such as workstations, tablets, smart phones and so on). It can analyze and extract various statistics about your configuration. *GeoAssistant* can also provide step by step guidance for coding the *GEOPARM* statements when adding new devices to an existing configuration.

What's new or changed in GDPS/XRC 3.10

- ▶ In an effort to reduce the various products and tools required for XRC performance monitoring, eliminate the requirement for add-on automation and to provide tighter integration with GDPS automation, GDPS has started to integrate and provide performance monitoring capability as part of GDPS. In GDPS/XRC 3.10 the first installment of GDPS/XRC integrated performance monitoring is delivered. The objective of this first delivery is to make GDPS/XRC aware of System Data Mover performance data and to start using it to drive alerts and actions. The intent of this first installment is to provide autonomic "self-protection" capabilities that equal or exceed the XPM Batch Exception Monitor function. The monitoring function includes:
 - The ability to define, in a *PARMSET* dataset, policy such as alert thresholds for percent of cache usage and residual counts and whether GDPS should automatically suspend a session if the exposure time threshold is exceeded.
 - A command, *GDPSXPM*, to manage monitoring which supports actions such as halting or restarting monitoring or syntax checking the *PARMSET*.
- ▶ The *THRESHOLD* specification in GEOPLEX OPTIONS which could be used to automate alerts based on session delay is *ignored*. If automated alerting and suspension by GDPS is desired, the new integrated monitoring capability must be enabled.
 - GDPS 3.10 is the last release to *tolerate* the *THRESHOLD* specification. You must remove *THRESHOLD* from GEOPLEX OPTIONS to ensure future compatibility.
- ▶ The following new GDPS Health Checks are introduced:
 - *GDPS_Check_SPOF* checks the I/O configuration in your SDM and GDPS Controlling System(s) for single points of failure using the IOSSPOF service.
 - *GDPS_Check_GRS* checks that the GDPS and XRC recommended GRS RNL definitions have been implemented.
 - *GDPS_Check_CONFIG* checks that the XRC *PARMLIB SuppressTimestamp* setting introduced in z/OS V1.13 is specified as YES per XRC recommendations on the SDM and Controlling systems.
- ▶ The XRC configurations supported by the GDPS/XRC Region Switch and Return Home procedures have been expanded to include configurations that have FlashCopy in only one region as well as configurations with no FlashCopy in either region.
 - The region switch procedures are enhanced with the addition of a new *WRITABLETARGET* operand on the *XRC FCESTABLISH* script statement which can be used in conjunction with INCREMENTAL FlashCopy for SECONDARY or REVERSEFLASH. The *WRITABLETARGET* operand removes the requirement to wait for the background copy for the final incremental FlashCopy to complete during the switch process, thereby reducing the duration of the planned outage for the production systems during the switch process.
- ▶ It is now possible, in conjunction with new function added in System Automation V3.4 (with APAR), to remove deleted GDPS scripts without requiring NetView to be recycled.
- ▶ The minimum Central Storage recommendation for Controlling systems has been increased to 1 GB⁴.

⁴ Note that 1 GB is the base storage recommendation and does not include any additional storage that would be required to start up SDMs in the Controlling system in order to perform recovery of tertiary devices in the Controlling system

- ▶ The GDPS-recommended sample MSGFLDxx member for Message Flood Automation (MFA) is updated to change the attribute of the XCFAS job from NODISPLAY to DISPLAY for *REGULAR* messages.

GDPS/XRC 3.9 SPEs

There is no new function introduced via SPE for 2-site GDPS/XRC implementations. There is, however, new GDPS/XRC function introduced for GDPS/MzGM environments. Refer to “GDPS/MGM 3.9 SPEs” on page 12.

New GDPS Tools for GDPS/XRC

- ▶ The *GDPS/XRC Performance Toolkit* is made available. The Toolkit which complements the XRC Performance Monitor product (XPM) is a collection of programs that help with implementation, monitoring, and maintenance of z/OS Global Mirror (XRC) systems. The tools are intended for use by GDPS administrators, storage administrators, and capacity planning staff.

What's new or changed in GDPS/GM 3.10

- ▶ GDPS now supports the Global Mirror FlashCopy target devices (C-disk or GMFC) to be defined in alternate subchannel set MSS1. This effectively doubles the number of primary devices that can be supported by GDPS/GM to nearly 64 K.
 - GDPS Query Services **GDASD** query is extended to return 5-digit device addresses for devices using alternate subchannel set support.
- ▶ New panels are introduced, simplifying the task of managing GDPS Health Checks. The panels allow performing tasks such as viewing health check status, activating and deactivating checks, running checks and reviewing check results and so on. Using this interface removes the requirement for GDPS staff to use the SDSF interface for viewing GDPS check results.
- ▶ It is now possible, in conjunction with new function added in System Automation V3.4 (with APAR), to remove deleted GDPS scripts without requiring NetView to be recycled.
- ▶ The support to allow co-location of the R-sys (remote Controlling system) function for multiple instances of GDPS/GM in a single z/OS image is extended. The R-sys function for each GDPS instance, running in a separate NetView instance within a single z/OS image, can now execute scripts simultaneously. This provides operational independence for the different R-sys instances and can facilitate improved recovery times by allowing parallel recovery action across multiple instances.
- ▶ The minimum Central Storage recommendation for Controlling systems is increased to 1 GB.

GDPS/GM 3.9 SPEs

- ▶ A new *TERMINATE* option is added to the **GDASD RECOVER** script statement for use in some specific scenarios where you require the GM secondary devices to be left in a *SIMPLEX* rather than the default PRIMARY SUSPENDED state.
- ▶ The R-sys configuration validation function is extended to also perform validation of the FC1 (practice FlashCopy) devices that are defined in the GEOMPARM configuration with no UCB in the R-sys (No UCB FlashCopy targets). This validation provides early detection of any I/O configuration issues associated with these devices.

New GDPS Tools for GDPS/GM

- ▶ The *GDPS Distributed System Hardware Management Tool* is made available. This tool allows you to perform BCP Internal Interface-like hardware actions against servers and virtual machines on a number of different platforms. It complements the workload management capabilities of the GDPS Distributed Cluster Management function extending the end-to-end reach of GDPS to distributed server platform hardware.

What's new or changed in GDPS/MzGM 3.10

- ▶ GDPS now provides supported procedures for Region Switching and Return Home in an MzGM Incremental Resynchronization configuration. The procedures allow for planned switching of the production workload between regions and return home following an unplanned recovery in the recovery region.
- ▶ The **XDASD SESSION** query in GDPS Query Services is enhanced to report on the status of Automatic Incremental Resynchronization (AutoIR).

GDPS/MzGM 3.9 SPEs

- ▶ Automatic Incremental Resynchronization (AutoIR) capability is introduced in GDPS/XRC to allow GDPS to optionally perform incremental resynchronization of the XRC session automatically following a planned or unplanned HyperSwap. AutoIR is implicitly controlled by the presence or absence of a customer supplied GDPS/XRC Takeover script based on a predefined naming convention. This function helps to minimize operator intervention as well as the elapsed time between the completion of a HyperSwap event and the subsequent resynchronization of XRC using the swapped-to disk.
- ▶ GDPS/PPRC HyperSwap processing in an MzGM IR configuration is improved to no longer wait for acknowledgement from GDPS/XRC of the XSWAP PREPARE operation while application I/O is quiesced. This check, now performed after I/O is resumed in the application systems, and can potentially provide significant reduction in overall HyperSwap impact time.

What's new or changed in GDPS/MGM 3.10

- ▶ GDPS/GM, when used in an MGM Incremental Resynchronization (IR) configuration, adds support for the Kg-sys to have B-disk devices (PPRC Site2 disks) defined in alternate subchannel set MSS1. When used in conjunction with the GDPS/GM support for defining the GM FlashCopy (GMFC or D-disk) devices in alternate subchannel set MSS1 on the Kr-sys, this allows you to manage nearly 64 K primary devices in an MGM IR configuration.
 - In conjunction with this support, the Modify Standard Action now allows specification of 5-digit A-disk or B-disk Load Addresses for a selected system.
- ▶ GDPS/GM Query Services available for an MGM IR configuration is extended:
 - The **GDASD** query, previously unavailable for MGM IR environments, is now supported and can return information pertaining to the GM configuration for both the active GM relationship and the standby GM relationship. These queries are available on both the Kg and Kr systems.
 - 5-digit device addresses are returned when querying information that includes devices defined in alternate subchannel set MSS1.
- ▶ The ability to execute scripts in parallel when the Kr-sys function for multiple GDPS/GM instances are co-located in the same z/OS image is also applicable to GDPS/GM instances for GDPS/MGM environments, IR or non-IR.
- ▶ GDPS 3.10 is the last release to support flat file input of the disk configuration in the GDPS/MGM IR Tool via the GMTPARM DD card. Retrieval of the disk configuration will be based on querying the active GDPS configuration.
- ▶ GDPS 3.10 is the last release to support use of the **GDASD STG1CLA** and **GDASD STG1CLR** script statements. New statements have been available to replace these statements.

GDPS/MGM 3.9 SPEs

- ▶ GDPS/GM Config processing for an MGM environment is improved such that it is no longer necessary to wait for the GDPS/PPRC A/B pairs to complete transition from PENDING.XD before attempting the GM Config action.

Statement of direction

IBM intends to deliver a four site solution to add to the GDPS solution family. This capability would allow 4 copies of data to be managed by GDPS across sites in a production region and disaster recovery region, provide the ability to switch between regions, and provide customers with both high availability and disaster recovery in both regions.

End of support

- ▶ Support for z/OS release V1.11 is discontinued. GDPS must be running on z/OS V1.12 or higher for continued support.
- ▶ Support for System Automation for z/OS V3.2 will be discontinued on April 30, 2013. After this date, you must be running System Automation for z/OS V3.3 or higher for continued support.
- ▶ For GDPS/HM if you are using
 - Tivoli® System Automation for GDPS/PPRC HyperSwap Manager with Netview, V1.1.3 is the minimum supported prerequisite release/modification level. On August 31, 2013, the minimum supported level will be V1.1.5
 - Tivoli System Automation for GDPS/PPRC HyperSwap Manager, V1.1.2 is the minimum supported release/modification level. On August 31, 2013 the minimum supported level will be V1.1.3.
- ▶ In accordance with the GDPS “n, n-2” support policy, support for GDPS V3.7 will be discontinued on March 29, 2013.
- ▶ RCMF/PPRC V3.9 and RCMF/XRC V3.9 are the last supported releases of RCMF. Support for all releases of RCMF/PPRC and RCMF/XRC will be discontinued on March 31, 2014.



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