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IBM® GDPS® Application Qualification support for the ADVA FSP3000 Release 9.3 Dense Wavelength Division Multiplexer (DWDM) .

International Business Machines Corporation and ADVA AG Optical Networking have successfully completed application qualification testing of the ADVA FSP3000 Release 9.3.3 DWDM Platform for the following IBM Parallel Sysplex and Geographically Dispersed Parallel Sysplex™ (GDPS) IBM zEnterprise 196 (z196), IBM System z10 (z10 EC, z10 BC) , IBM System z9 (z9 EC, z9 BC)and IBM eServer zSeries 990 and 890 (z990, z890) environments.

- GDPS / Peer-to-Peer Remote Copy (PPRC) (Metro Mirror) using the following protocols:
 - ESCON or FICON for Storage Access
 - ESCON or FCP for mirroring
 - ISC-3 peer mode or 1x IFB for coupling facility (CF) and Server Time Protocol (STP) messaging to provide synchronization of servers.

Distances for the protocols supported for these GDPS applications are defined in the Qualification Results Summary below. Longer distances may be approved but require IBM RPQ 8P2263 or 8P2340. Additional testing may be required to approve the RPQ.

Qualification Results Summary:

ADVA PN Descriptor	Description	Protocols Supported	Supported Distance
Management Modules			
NCU	Node management module with SW load 9.3.3	-	-
Active and optical Modules			
4TCA – PCN	4-port 4G TDM card	4Gbps FCP 4Gbps ISL ISC3 peer mode	100 km
WCA-PC-10G	10G transparent channel card	4/8/10 Gbps ISL 4/8/10 Gbps FCP 1x IFB DDR (5 Gbps)	100km
EDFA-C-D20-VGC	Optical Amplifier, Double Stage 20 dBm		N/A
DCG-M/060/SSMF	Managed DCM using Chirped Fiber Bragg Gratings (CFG) 60km		N/A
RSM-OLM#1630	Fiber protection switch	This RSM can not be used alone. It must be used in conjunction with client layer protection.	40km

GDPS Application Limitations:

- IBM GDPS support is limited to DWDM product applications which utilize point-to-point fixed dark fiber network interconnect between sites.
- DWDM end-to-end networks, including DWDM components, transport elements and dark fiber links, must not exceed the equivalent of 900 meters differential delay between transmit and receive paths used for ISC-3 links or 1x IFB links transporting STP messages.
- Redundant ADVA FSP 3000 platforms, utilizing two site-to-site fiber pairs, are recommended for fiber trunk protection of ISC-3 peer mode Server Time Protocol (STP) message passing protocol links.
- Fiber trunk protection schemes should be designed with two trunk switching modules and four site-to-site fiber pairs carried over at least two diverse routes. STP links should connect using different trunk switching modules to ensure that a fiber trunk protection event does not interrupt all timing links simultaneously.

For the support of other GDPS features please refer to previous product releases and test results

Results achieved were in a test environment under laboratory conditions. IBM does not make any representations or warranties regarding the ADVA products. ADVA retains sole responsibility for its products, the performance of such products and all claims relating to such products, including without limitation its products' compliance with product specifications, industry standards and safety and other regulatory requirements.

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