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**IBM® GDPS® and Server Time Protocol (STP) Application Qualification support for Ericsson's Marconi MHL3000 Release 4.3.2**

International Business Machines Corporation and Ericsson AB. have successfully completed application qualification testing of the Ericsson Marconi MHL3000 Dense Wavelength Division Multiplexing (DWDM) Platform, Release 4.3.2 for the following IBM Parallel Sysplex and Geographically Dispersed Parallel Sysplex (GDPS) IBM System z10, z9 and IBM eServer zSeries 990 and 890 environments:

- GDPS / Peer-to-Peer Remote Copy (PPRC) (Metro Mirror) using the following protocols:
  - FICON for Storage Access
  - FCP for mirroring
  - ISC-3 for CF messaging
  - Sysplex timer links for synchronization of servers
  - ISC-3 Peer Mode with STP messaging for synchronization of servers
- GDPS / Extended Remote Copy (XRC) (z/OS Global Mirror) using FICON for asynchronous remote copy.

Distances for the protocols supported for these GDPS applications are defined in the Qualification Results Summary below. It may also be possible to support some protocols at greater distances, such as FICON, FCP, and InterSwitch Links (ISLs) if approved by IBM RPQ 8P2263.

**Qualification Results Summary:**

Transport Interface	Description	Part Number	Protocols Supported	Supported Distance
Marconi MHL3000 DWDM Release 4.3.2				
2.5G Transponder	TP 2G5 SR SFP TP 2G5 HP VOA SFP	1HAT61128ADU 1HAT61128ACC	ISC-3 Peer Mode w/STP – 2Gbps ISC-3 Peer Mode w/o STP – 2Gbps	100 km
2.5G Modular Xponder	TM 2G5 MULTI-PORT SFP	03HAT00066AAG	1/2Gbps FCP 1/2Gbps FICON 1/2 Gbps ISLs 1 GbE	100 km
10G Data Muxponder	10G DATA MUXP 80CH NRZ 10G DATA MUXP 80CH RZ	02HAT00113AAE 02HAT00114AAG	1G FCP 1G Ficon 1G ISLs 1 GbE	100km ,
10G Transponder	10G TRANSP 80CH RZ 10G TRANSP 80CH NRZ	02HAT00128AAF 02HAT00127AAD	10 GbE	100km
DCM Lite 100km	LITE DCM 100 KM	1400886-0109		
MH Amp SSA 22/20, DSA 22/20, SSA 29/20, DSA 29/20, DSA 22/18	MH SINGLE STAGE AMP 22/20 MH DUAL STAGE AMP 22/20 MH SINGLE STAGE AMP 29/20 MH DUAL STAGE AMP 29/20 MH DUAL STAGE AMP 22/18	02HAT00116AAL 02HAT00115AAJ 02HAT00116ABD 02HAT00115ABB 02HAT00151AAL		
WSS 4x80	WAVE SWITCH 80CH 4 X 1 MUX	03HAT00067ABB		
WSS 8x40	WAVE SWITCH 40CH 8 x 1 MUX	03HAT00067ADL		

**GDPS Application Limitations:**

- IBM GDPS support is limited to DWDM product applications which utilize point-to-point fixed dark fiber network interconnect between Parallel Sysplexes.
- 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 GDPS ISC links transporting STP message passing.
- Redundant MHL3000 platforms, utilizing two site-to-site fiber pairs, are recommended for fiber trunk protection of ISC-3 Server Time Protocol (STP) message passing protocol links.

Results achieved were in a test environment under laboratory conditions. IBM does not make any representations or warranties regarding Ericsson products. Ericsson 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.

The terms eServer, FICON, GDPS, Geographically Dispersed Parallel Sysplex, IBM, Parallel Sysplex, Sysplex Timer, zSeries, system z, and z/OS are trademarks or registered trademarks of International Business Machines Corporation.

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