

Hitachi Mainframe Replication Extensions

FAQ

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March 2021

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What is Hitachi Mainframe Replication Extensions?

Hitachi Mainframe Replication Extensions is a started task running on the customer's IBM® z/OS™ host that periodically collects performance statistics for Hitachi Business Continuity Manager/Hitachi Universal Replicator for z/OS™ replication copy groups. The data is recorded for historical trend analysis. Mainframe Replication Extensions also provides real-time monitoring of the Consistency Time Delta value, which is the time in seconds since the copy group was last in consistency. Customers can set thresholds for the CTDelta_Time value that will trigger “Yellow” and “Red” alerts and messages are written to the z/OS™ host which can be processed by a customer's existing automation to create problem tickets and notify someone of degradation.

Who can benefit from Hitachi Mainframe Replication Extensions?

Hitachi Business Continuity Manager (BCM) customers using Hitachi Universal Replicator for z/OS™ can benefit from the historical tracking of replication performance statistics and real-time monitoring/alerting.

How do I get Hitachi Mainframe Replication Extensions?

Hitachi Vantara employees can download Hitachi Mainframe Replication Extensions from the Technical Information Service Center (TISC). Once logged into TISC select the “Technical Information/Documentation (downloads)” option. Select “Hitachi Mainframe Replication Extensions” option in the pull down for “And/Or Hitachi Vantara Software Product” selection list and click on the “Search” button. Mainframe Replication Extensions software and manuals are available there.

Partners and customers can download Hitachi Mainframe Replication Extensions from Support Connect. Log in to Support Connect and click the “Downloads” tab under Quick Links. On the “Software Download” tab, click “MF Replication Extensions.”

What are the benefits?

Customers who choose to use Hitachi Mainframe Replication Extensions can report on trends in consistency time. Using data provided through the report tool and the provided SAS™ and MS-Excel™ macros the CTDelta_Time values can be graphed to show cyclical degradation.

Customers who choose to use the console messages as the source for automation can create problem tickets alerting computer operations, storage administrators, and others of degradation in replication consistency.

How do I install it?

As mentioned in the “How do I get Hitachi Mainframe Replication Extensions” section above, the product and documentation can be downloaded from the Technical Information Service Center (TISC) site. The installation procedure is in Appendix-A of the Hitachi Mainframe Replication Extensions User's Guide.

What threshold settings should I use for triggering alerts?

Hitachi Vantara's recommendation is to use the default values for a two or three week period to collect historical data. After the monitoring period is complete the user (a storage administrator, systems' programmer, performance analyst) can run the provided report and SAS™ or MS-Excel™ macros to list the CTDelta_Time values in chronological sequence and generate graphs that show peaks in CTDelta_Time values.

Ideally, the values for the "Yellow" and "Red" alerts would be greater than what the historical trend shows to be typical peaks; however, customers may have Service Level Agreements that dictate lower trigger values.

What happens during "Yellow" and "Red" alerts?

Messages are written to the z/OS™ console and to an internally maintained "event log" file. The warning status level is changed to reflect the new warning level (i.e., from "Green" to "Yellow" or "Red"). A query is performed to display that status of replication paths and additional messages are written to the console and event log reflecting the status of replication paths. Then the event log switches to allow customer staff to view the event log as it led to the alert.

Customers can use any console automation tool to process the messages written to the console. Hitachi Vantara expects that problem tickets will be generated for either a "Yellow" or "Red" alert, and the appropriate customer staff notified.

How often does the Mainframe Replication Extensions started task perform queries?

The interval is set by the customer through a parameter in the started task; however, the default is 15 minutes. The interval can be any integer value between five minutes (5) and one hour (60 minutes).

What are the default and acceptable values for the "Yellow" and "Red" alerts?

The default value for a "Yellow" alert is 420 minutes (7 hours); the acceptable range is from one (1) minute to 720 minutes (12 hours).

The default value for a "Red" alert is 720 minutes (12 hours); the acceptable range is from 31 minutes to 1440 minutes (24 hours). There must be at least a 30 minute difference between the "Yellow" alert trigger and the "Red" alert trigger. This grace period is meant to provide staff contacted for the "Yellow" alert to research the problem before any escalation is initiated.

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