

Rocket® Mainstar Database Backup & Recovery for DB2 on z/OS

Simplify DB2 on z/OS Backup, Recovery, and Disaster Recovery Operations



- Back up DB2 systems instantaneously with no impact to applications
- Reduce recovery time and complexity for fast restore and parallel recovery
- Transform disaster recovery into a disaster restart process reducing RTO
- Reduce costs by using less CPU and I/O resources significantly
- Reduce storage costs by utilizing one backup for multiple purposes
- Eliminate backup windows and extend batch processing windows
- Ensure successful recovery every time with backup validation
- Eliminate contention on production objects by creating image copies from system backups
- Simplify and enhance DB2 backup system implementations

Rocket® Mainstar Database Backup and Recovery for DB2® (DBR for DB2) is a storage-aware backup and recovery solution that integrates storage processor fast-replication facilities with DB2 backup and recovery operations to allow instantaneous backups, reduce recovery time, and simplify disaster recovery procedures while using less CPU, I/O, and storage resources.

DB2 for z/OS® is the foundation database for many enterprise applications that manage today's business processes. Its performance, scalability and high availability features provide the data management support required for 24x7 availability requirements. DB2 systems require special consideration when planning and implementing backup, recovery, and disaster recovery strategies; fast, non-intrusive backup and recovery solutions are required to enable high availability for these critical database management systems.

DBR for DB2 is a storage-aware backup and recovery solution that integrates storage system fast-replication facilities with DB2 backup and recovery operations. DBR for DB2 storage-aware backup processes allow data to be backed up instantly without affecting running applications. DB2 recovery is performed quickly using storage-based fast-replication facilities to restore backups while invoking DB2 recovery processes in parallel to reduce overall recovery time and minimize application downtime.

DBR for DB2 facilitates a DB2 system level back up (SLB) methodology. It coordinates DB2 system and storage-based fast-replication facilities to backup DB2 systems fast and effectively without using host CPU and I/O resources. DBR for DB2 backups can be used for DB2 system recovery, application recovery, object recovery, and for DB2 disaster recovery purposes. Using an effective DBR for DB2 backup methodology allows DB2 backups to be used for multiple recovery purposes saving CPU, I/O, and storage resources required to create multiple backups for specific uses.

High Level Features/Benefits

- | | | |
|---------------------------------------|--|---|
| <p>DB2 System Level Backup</p> | <ul style="list-style-type: none"> ❖ Uses point-in-time extract files to increase the accuracy and speed of audits. | <ul style="list-style-type: none"> ❖ Keeps track of the health of your metadata structures. |
| <p>Storage-Aware</p> | <ul style="list-style-type: none"> ❖ Storage-aware database utilities use storage processor fast-replication to copy data. | <ul style="list-style-type: none"> ❖ Creates instant backups and reduces CPU and I/O costs by leveraging storage-based fast-replication to copy data structures. |
| <p>Storage Blades</p> | <ul style="list-style-type: none"> ❖ Provides support for IBM, EMC, and HDS storage systems and fast replication processes. | <ul style="list-style-type: none"> ❖ Supports all storage vendor hardware and fast-replication |

High Level Features/Benefits

Metadata Repository	<ul style="list-style-type: none"> ❖ Specialized metadata repository used to correlate DB2 storage volumes with backup volumes and recovery structures. 	<ul style="list-style-type: none"> ❖ Allows fast DB2 restore and parallel recovery operations and allows system backups to be used for system, application, or object recovery.
Multi-Purpose System Level Backup	<ul style="list-style-type: none"> ❖ Creates a system level backup that can be used for system recovery, application recovery, object recovery, or disaster recovery using disaster restart procedures. 	<ul style="list-style-type: none"> ❖ Reduces backup costs by utilizing one backup for multiple purposes.
DB2 Discovery, Analysis, and Configuration	<ul style="list-style-type: none"> ❖ Discovers DB2 systems and provides configuration advice for data set layouts. ❖ Optionally moves data sets to accommodate a system level backup methodology. 	<ul style="list-style-type: none"> ❖ Identifies DB2 data set layouts and helps setup level DB2 configurations to accommodate a system backup methodology that supports recovery objectives.
Backup Profiles	<ul style="list-style-type: none"> ❖ Defines backup type, fast replication usage, volume mappings, and retention period options needed to perform and record a system level backup. 	<ul style="list-style-type: none"> ❖ Automatically performs accurate DB2 backups on a regular schedule.
Validity Checking	<ul style="list-style-type: none"> ❖ Automatically validates DB2 backups are complete and can be used for recovery. 	<ul style="list-style-type: none"> ❖ Uses DB2 discovery to ensure backups are complete and DB2 data can always be restored.
Reports	<ul style="list-style-type: none"> ❖ Details backup and recovery information. 	<ul style="list-style-type: none"> ❖ Helps manage your backup and recovery operations.
Create Image Copies from a System Backup	<ul style="list-style-type: none"> ❖ Creates standard image copies from a system level backup. 	<ul style="list-style-type: none"> ❖ Eliminates contention on production objects. ❖ Speeds up and simplifies recovery.
Partial DB2 System Backup	<ul style="list-style-type: none"> ❖ Provides the ability to backup and restore a subset of the DB2 system. 	<ul style="list-style-type: none"> ❖ Provides backup flexibility and saves resources and costs.
Tape Offload	<ul style="list-style-type: none"> ❖ Archives disk-based backups to tape or disk, including remote disk. ❖ Archive copies can be used for subsequent recoveries. 	<ul style="list-style-type: none"> ❖ Reduces costs through effective storage hierarchy utilization.
DB2 System Recovery	<ul style="list-style-type: none"> ❖ Provide effective restore of a DB2 system and recovers the system in parallel to help reduce recovery time and reduce application downtime. 	<ul style="list-style-type: none"> ❖ Simplifies recovery operations and reduces recovery time to promote high availability.

High Level Features/Benefits

DB2 Application and Object Recovery Profiles

- ❖ Performs application and object level recovery from a system level backup.
- ❖ Simplifies backup and recovery operations and reduces the need for image copy backups.

DB2 Disaster Recovery and Restart

- ❖ Transforms traditional DB2 disaster recovery procedures into a DB2 tape-based disaster restart process.
- ❖ Simplifies DB2 DR operations and reduces recovery time objectives.

System Requirements

Software Requirements

- ❖ zOS V1R11 or higher
- ❖ DB2 10 for z/OS or higher

DFSMSdss Requirements

- ❖ DFSMSdss must be version 1.8 or later to use DFSMSdss backups and to create a DB2 image copy from a system level backup

APF Authorization Requirements

- ❖ APF Authorized library
- ❖ TSO Authorized command

