

## E22-211 Mainframe Business Continuity - Remote Replication Exam Description

**Exam Number**  
E22-211

**Duration**  
90 Minutes  
(Approximately  
60 Questions)

**Available Languages**  
English



The Mainframe Business Continuity Remote Replication Exam is a qualifying exam for the EMC Proven Professional Mainframe Business Continuity track. The Mainframe Remote Replication Exam (E22-211) ensures individuals can successfully implement the ResourcePak Base, SRDF and AutoSwap suites of software for Symmetrix-based storage in z/OS environments. This includes the deployment and utilization of SRDF/S, SRDF/CG, SRDF/AR, SRDF/A, SRDF/A with MSC and AutoSwap, as well as understanding key host and application considerations.

### Exam Topics

Products likely to be referred to on the exam include:

- Fundamentals of Symmetrix for SRDF
- Resource Pak Base
- SRDF/S
- Consistency Group
- SRDF/AR
- SRDF/A
- SRDF/A MSC
- SRDF AutoSwap
- SRDF/STAR
- Host and Application Considerations
- Design Considerations

Topics likely to be present on this exam include:

- **Fundamentals of Symmetrix for SRDF**
  - Identify the front end directors, back end directors, cache and disk location in a Symmetrix (SRDF director types)
  - Explain the relationship between a Symmetrix physical disk and a logical volume
  - Describe the usage and limitations of mirror positions as it relates to the various Remote Replication solutions (including CKD RAID 5/10)
- **Resource Pak Base**
  - Customize the SCFINI based on the SRDF requirements and licensed features
  - Define and use Gatekeepers in an SRDF environment
  - Define and use GNS in an SRDF environment
  - Describe the use of commands (SAR, MSC, DAS and CSC) to operate an SRDF environment
- **SRDF/S**
  - Explain SRDF concepts, connectivity and modes
  - Define prerequisites, concepts, considerations and usage of SRDF/S operations using SRDF Host Component
  - Define prerequisites, concepts, considerations and usage of SRDF/S disaster recovery operations
  - Define prerequisites, concepts, considerations and usage of SRDF/S concurrent operations
- **Consistency Group**
  - Identify purpose and operations of Consistency Groups
  - Install and customize Consistency Groups
  - Define prerequisites, concepts, considerations and usage of Consistency Group commands and debugging options to monitor and control Consistency Groups

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- **SRDF/AR**
  - Explain SRDF/AR concepts, connectivity and modes
  - Implement SRDF/AR Single-Hop and Multi-Hop configurations in a z/OS environment
  - Define prerequisites, concepts, considerations and usage of SRDF/AR disaster recovery operations
  - Restart or recover the SRDF/AR cycle after a disaster has been resolved
  
- **SRDF/A**
  - Explain SRDF/A concepts, connectivity and modes
  - Plan, install and customize an SRDF/A solution
  - Manage SRDF/A operations
  - Define prerequisites, concepts, considerations and usage of SRDF/A disaster recovery operations
  - Configure and use the SRDF/A monitor
  
- **SRDF/A MSC**
  - Explain SRDF/A MSC concepts, connectivity and modes
  - Plan, install and customize an SRDF/A MSC solution
  - Manage SRDF/A MAC operations
  - Define prerequisites, concepts, considerations and usage of SRDF/A MSC disaster recovery operations
  
- **SRDF Autoswap**
  - Explain SRDF Autoswap concepts, connectivity and modes
  - Plan, install and customize an SRDF Autoswap solution
  - Manage SRDF Autoswap operations
  - Define prerequisites, concepts, considerations and usage of SRDF Autoswap disaster recovery operations for planned and unplanned scenarios
  
- **SRDF/STAR**
  - Explain SRDF/STAR concepts, connectivity and modes
  - Plan, install and customize an SRDF/STAR solution
  - Manage SRDF/STAR operations
  - Define prerequisites, concepts, considerations and usage of SRDF/STAR disaster recovery operations for planned and unplanned scenarios
  
- **Host and Application Considerations**
  - Identify the application performance impact of using the different SRDF family solutions on the source and target
  - Select and use the appropriate SRDF solution (SRDF/S, SRDF/AR or STAR) for the type of application or task being performed (backup, testing, etc.)
  - Define the host considerations for use on z/OS hosts
  - Identify the RPO, RGO and RTO considerations when applied to SRDF solutions

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- **Design Considerations**
  - Achieve service levels by selecting the most appropriate remote replication solution for a given business case
  - Determine which RAID solution would be best suited for workload of the environment
  - Determine when and where remote consistency is required
  - Identify customer DR requirements and apply them to a total business recovery
  - Plan, design and architect an SRDF/Synchronous solution considering Failover/Failback/Return Home procedures
  - SRDF/A: Plan, design and architect an SRDF/Asynchronous solution
  - SRDF/AR: Plan, design and architect an SRDF/AR solution for Multi-Hop
  - SRDF/AR: Plan, design and architect an SRDF/AR solution for Single-Hop
  - SRDF/STAR: Plan, design and architect an SRDF/STAR solution

### **Recommended Training**

Recommended preparation for this exam is the EMC Proven Professional Mainframe Business Continuity curriculum.