

B2B Module DataPower Release 7.1.0



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DataPower Release 7.1.0, B2B Module.

B2B Module

What Is It.

B2B features, formerly available on XB62 appliances only, are available as a licensed software module called **B2B Module** on physical & virtual appliances.

IBM DataPower® Gateway

IBM DataPower Gateway Virtual Edition

WebSphere® DataPower XI52

WebSphere DataPower XI52 Virtual Edition

WebSphere DataPower XG45

WebSphere DataPower XG45 Virtual Edition

WebSphere DataPower XB62 (available as physical appliance only) have B2B features by default.

How to Use It

Activate "B2B feature" via IBM Passport Advantage® tool.

Enable B2B Storage and start using B2B features *incl.* B2B Persistence, Partner Profile management, and B2B Gateway transactions.

In release 7.1.0, B2B features becomes an add-on software module available on other form factors of DataPower appliances (as listed on the chart). The primary B2B features include B2B Gateway service with B2B protocols of AS1/AS2/AS3, and ebMS2/CPA support, B2B storage and transaction viewer, B2B partner profile management, and B2B high-availability support, and so forth.

You can purchase and activate B2B module from IBM Passport Advantage.

The following pages will show you the visible changes after activating B2B license and also provide instructions about how to enable B2B storage, by using enhanced user interfaces, to start B2B transactions on a B2B-licensed appliance.

B2B Module - WebGUI

Control Panel

B2B

B2B icons →

This shows the WebGUI Control panel when B2B module is activated.

The screenshot displays the B2B module's WebGUI Control Panel. It is organized into several sections:

- B2B:** Contains three icons: B2B Partner Profile, B2B Gateway Service, and B2B Transaction Viewer.
- Services:** Contains five icons: Web Service Proxy, Multi-Protocol Gateway, XML Firewall, Web Application Firewall, and XSL Accelerator.
- Monitoring and Troubleshooting:** Contains four icons: View Logs, Troubleshooting, Web Services Monitor, and View Status.
- Files and Administration:** Contains five icons: File Management, System Control, Import Configuration, Export Configuration, and Keys & Certs Management.

Once booting up and login the appliance where B2B licensed has been activated, the first thing you notice is a new set of B2B icons on the Control Panel. All the B2B services (for example, B2B Gateway Service), status providers (for example, B2B High-Availability Status), and actions (for example, Archive B2B Transaction Data) will be available on the navigation menu. You will be able to access any of DataPower user interfaces like WebGUI, CLI, and XML Management interface to define B2B services and objects.

B2B Module - Storage (1 of 3)

What is B2B Storage.

B2B Storage — supported by **Metadata storage** and **Document storage** — requires 2 disk partitions, along with encryption management of the Document Storage. The 2 partitions are 50/50 split of disk size.

When to enable B2B Storage.

You have to enable B2B storage on the RAID volume in order to enable B2B Persistence and use the B2B Gateway services to process B2B transactions.

You may want to enable B2B storage when currently not activating B2B module and planning to enable B2B transactions so that it doesn't need to *re-initialize* the RAID volume.

The B2B storage (namely “B2B Persistence”) built upon the RAID disk is required to run B2B transactions. The B2B storage consists of metadata and document storage: the first RAID disk partition hosts an on-box database to store the metadata and the second partition, optionally encrypted using user keyphrase, stores document payloads.

The B2B storage scheme requires two RAID partitions. If you may want to run the B2B module on a non-XB62 appliance at any time in the future, you may want to create the 2-partition B2B scheme in advance so that you can eliminate the data migration and RAID *re-initialization* task (Note: to switch from 1-partition RAID scheme to 2-partition B2B storage scheme you have to re-initialize RAID disk and all the existing data on the RAID disk will be destroyed.)

B2B Module - B2B Storage (2 of 3)

How to enable B2B Storage.

At initial configuration, follow the **Installation Wizard** (CLI command “**startup**”) prompts in the step of “Configure the RAID volume”.

Manually use the updated “**Initialize file system**” action to create RAID partitions supporting B2B storage:
Use CLI: **raid-volume-initialize-filesystem** command

```
raid-volume-initialize-filesystem raid0 on passphrase mypassphrase  
# Initialize RAID volume file system of B2B storage, with unencrypted Document storage.  
raid-volume-initialize-filesystem raid0 on none  
# Or when you want to initialize the RAID volume file system with entire disk space (no B2B storage)  
raid-volume-initialize-filesystem raid0 off
```

Use WebGUI: **RAID Array** configuration > **Initialize file system** action.

The “Installation Wizard” used when setting up the initial firmware configuration includes the prompts for setting up the B2B storage. You will just need to follow the prompts to select to enable or not enable B2B storage. To re-configure the B2B storage, you can use “Initialize file system” action to initialize the RAID disk as B2B storage scheme or the traditional 1-partition scheme. The usages of CLI “raid-volume-initialize-filesystem” command are inlined for illustration.

If you need to switch from 1-partition scheme to B2B storage (or the reverse way) on a physical appliance, you will need to perform “Delete array” and “Initialize array” then “Initialize file system”.

B2B Module - B2B Storage (3 of 3)

Troubleshooting.

Use the RAID status providers to get the latest status after enabling B2B storage (or any change to the RAID volume).



RAID Partition Status

Refresh Status

Volume Name	Partition	Purpose	Encryption Algorithm	Encryption Method	Total Size (KB)	Free Space (KB)
raid0	1	Local Storage	None-Unsupported	Not Applicable	576,262,020	576,059,204
raid0	2	B2B Document Storage	AES with SHA-1	User Passphrase	576,262,408	576,059,972

Best Practices.

For Virtual appliance, at the capacity planning phase, plan to increase a larger disk size to be assigned to the RAID when deployment (currently defaulted to 16 GB), especially important when processing large B2B documents and manage high throughput.

Use Archive to back up B2B data before using secure backup-restore for migration.

For using XML Management SOMA action to initialize the RAID file system, use the new action object `<InitializeRaidVolumeFilesystem2>`. Following objects are obsoleted: `<InitializeRaidVolumeFilesystemVirtual>`, `<InitializeRaidVolumeFilesystemEncryption>`, and `<InitializeRaidVolumeFilesystemNoEncryption>`.

For troubleshooting whether B2B storage is correctly created, you can check following:
operational state up of Hard Disk Array object 'raid0' and two partitions are enumerated in the RAID partition status provider
operational state up of "B2B Persistence"

If you are to run B2B transactions on a Virtual appliance, then you would want to add the RAID size into your capacity planning checklist and it is highly recommended to increase the disk size when deploying the DataPower image on a hypervisor.

It is a best practice to perform RAID actions (including Initialize File system) manually via CLI. However, if you employed XML Management to perform RAID file system initialization, you will need to use the new action object `<InitializeRaidVolumeFilesystem2>` to replace the obsoleted action objects

B2B – For more information

For more B2B module information, see the 7.1.0 knowledge center.

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