Network and port requirements

For proper communication, the IBM StoredIQ components must be able to connect to each other.

You must enable network connectivity from the following locations:

- The data server IP address to the gateway IP address on port 11103
- The gateway IP address to and from the application stack IP address on port 8765 and 5432
- Ports 80, 443, and 22 from the administrative workstation to the application stack and data server IP addresses
- Port 22 from the administrative workstation to the gateway IP address

TCP: port ranges for the firewall

To ensure the network access for desktop volumes, the following port ranges must be open through a firewall.

- 21000-21004
- 21100-21101
- 21110-21130
- 21200-21204

Default open ports

SSH port 22

By default, port 22 is open on all IBM StoredIQ hosts. The port is used for Secure Shell (SSH) communication and allows remote administration access to the VM. In general, traffic is encrypted using password authentication. To add a layer of security, you can establish key-based authentication for passwordless SSH logins to any of the IBM StoredIQ nodes in your environment as described in "Configuring SSH key-based authentication" on page 45.

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- **Enable or disable ports or services on the IBM StoredIQ data server**

  To manage ports, you can use the /usr/local/storediq/bin/util/port_handler.pyc script with the appropriate parameter:

  ```
  python /usr/local/storediq/bin/util/port_handler.pyc -parameter
  ```

  - **-s**

    To list the current rules in iptables

  - **-l**

    To list the supported services

  - **-d port_number|'port_range'**

    To delete a port or a range of port numbers from iptables, for example:

    ```
    python /usr/local/storediq/bin/util/port_handler.pyc -d '21200:21299'
    ```

- **-e 'service_name'**

  To enable a specific service, for example, to enable HTTPS services:

  ```
  python /usr/local/storediq/bin/util/port_handler.pyc -e 'PROD-https'
  ```

- **-d 'service_name**

  To disable a specific service, for example, to disable HTTPS services:

  ```
  python /usr/local/storediq/bin/util/port_handler.pyc -d 'PROD-https'
  ```

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- **Supported chain and rules on the IBM StoredIQ gateway**

  In iptables, the following firewall and chain rules are defined:

  ```
                              'PROD-transport':
  ['5434','8765','7766','11102','11103','11104'],
                              'PROD-https':['443'],
                              'PROD-ssh':['22'],
                              'PROD-web':['80'],
                              'PROD-postgres':['5432']
  ```

  ```
    'desktop' service:
                              'PROD-broker':['21000'],
                              'PROD-collectionsvc':['21300:21399'],
                              'PROD-desktopupgrade':['21004'],
                              'PROD-objlistmgr':['21100:21199'],
                              'PROD-objlistsvc':['21200:21299'],
                              'PROD-registration':['21001'],
                              'PROD-session':['21002'],
                              'PROD-task':['21003'],
  ```

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