

# CentOS Stream 8 – Firebird SQL

|             |          |
|-------------|----------|
| Version:    | 1.0.0    |
| Created by: | cloudimg |

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## 1.) Overview

This document is provided as a user guide for the CentOS Stream 8 – Firebird SQL product offering on the Azure Marketplace. Please reach out to [support@cloudimg.co.uk](mailto:support@cloudimg.co.uk) if any issues are encountered following this user guide for the chosen product offering.



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## 2.) Access & Security

Please update the security group of the target instance to allow the below ports and protocols for access and connectivity.

| Protocol   | Type | Port | Description   |
|------------|------|------|---|
| SSH        | TCP  | 22   | SSH connectivity  |
| Custom TCP | TCP  | 3050 | Firebird SQL database listener port for remote connectivity |

## 3.) System Requirements

The minimum system requirements for the chosen product offering can be found below

| Minimum CPU | Minimum RAM | Required Disk Space |
|-------------|-------------|---------------------|
| 1           | 1 GB        | 20 GB               |

## 4.) Connecting to the Instance

Once launched in the Azure Virtual Machines Service, please connect to the instance via an SSH client using the **azureuser** with the key pair associated at launch. Once connected as the **azureuser**, you will be able to **sudo** to the **root** user by issuing the below command.

Switch to the root user

```
sudo su -
```

## 5.) On Startup

An OS package update script has been configured to run on boot to ensure the image is fully up to date at first use. You can disable this feature by removing the script from `/stage/scripts/` and deleting the entry in crontab for the root user.

Disable the OS update script from running on reboot

```
rm -f /stage/scripts/initial_boot_update.sh  
crontab -e
```



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```
#DELETE THE BELOW LINE. SAVE AND EXIT THE FILE.
@reboot /stage/scripts/initial_boot_update.sh
```

## 6.) Filesystem Configuration

Please see below for a screenshot of the server disk configuration and specific mount point mappings for software locations.

```
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        464M    0  464M   0% /dev
tmpfs           481M    0  481M   0% /dev/shm
tmpfs           481M  6.5M  475M   2% /run
tmpfs           481M    0  481M   0% /sys/fs/cgroup
/dev/xvda2       38G  2.8G   33G   8% /
/dev/xvda1      2.0G  185M  1.7G  11% /boot
tmpfs           97M    0   97M   0% /run/user/1002
/dev/xvdf       9.8G   94M  9.2G   1% /opt/firebird
```

| Mount Point   | Description                         |
|---------------|-------------------------------------|
| /boot         | Operating System Kernel files       |
| /opt/firebird | Firebird SQL Installation directory |

## 7.) Server Components

Please see below for a list of installed server components and their respective installation paths. The below versions are subject to change on initial boot based on the initial\_boot\_update.sh script finding new versions of the software in the systems package repositories.

| Component    | Version | Software Home |
|--------------|---------|---------------|
| Cloud-Init   | 22.1    | /etc/cloud    |
| Firebird SQL | 4.0.1   | /opt/firebird |
| Azure CLI    | 2.53.1  | /lib64/az     |



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## 8.) Scripts and Log Files

The below table provides a breakdown of any scripts & log files created to enhance the useability of the chosen offering.

| Script/Log                   | Path           | Description  |
|------------------------------|----------------|--|
| Initial_boot_update.sh       | /stage/scripts | Update the Operating System with the latest updates available. |
| Initial_boot_update.log      | /stage/scripts | Provides output for initial_boot_update.sh                     |
| firebird_sysdba_password.log | /stage/scripts | Firebird SQL SYSDBA password file                              |

## 9.) Using System Components

Instructions can be found below for using each component of the server build mentioned in section 7 of this user guide document.

### Azure CLI

Using Azure CLI – as any OS user.

```
az
```

### Cloud-Init

Edit the /etc/cloud/cloud.cfg file to reflect your desired configuration. A link to the cloud-init official documentation can be found below for referencing best practise for your use case.

<https://cloudinit.readthedocs.io/en/latest/>

```
vi /etc/cloud/cloud.cfg
```

### Firebird SQL



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The Firebird SQL Database service has been configured to start on boot, please use the below commands to start, stop and check the status of the service.

```
#Check the Firebird SQL Server is running
systemctl status firebird

#Stop the Firebird SQL Server
systemctl stop firebird

#Start the Firebird SQL Server
systemctl start firebird
```

Once the Firebird SQL Database service has started, you will be able to access the database service via the below command as the **root** user from the server command line

```
isql -u sysdba
```

When connecting remotely to the database via a client and or GUI, please use the password value found in the /stage/scripts/firebird\_sysdba\_password.log file for access.



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