SAS® Data Loader 2.3 for Hadoop

SAS Data Loader 2.3 for Hadoop consists of two main areas for system requirements:

- SAS In-Database Technologies for Hadoop
- SAS Data Loader for Hadoop vApp

**Note:** SAS In-Database Technologies for Hadoop must be installed before the installation of the SAS Data Loader for Hadoop vApp in order for the vApp to communicate successfully with the Hadoop cluster.

### SAS In-Database Technologies for Hadoop

#### Hadoop Environment

System requirements for the Hadoop environment are as follows:

- Hadoop distribution:
  - Cloudera CDH 5.2 or 5.3
  - Hortonworks HDP 2.1 or 2.2
  - MapR 4.0.2

For information about Hadoop distribution requirements, see the “SAS 9.4 Support for Hadoop” web page at: [http://support.sas.com/resources/thirdpartysupport/v94/hadoop/](http://support.sas.com/resources/thirdpartysupport/v94/hadoop/)

- MapReduce2. (MapReduce 1 is not supported.)
- HiveServer2.

**Note:** If MapR is used, then Apache Hive 13 is required.

- SQOOP and OOZIE must be enabled in your Hadoop cluster in order to communicate with the DBMS to which SAS Data Loader for Hadoop users need access.

**Note:** If MapR is used, then OOZIE 4.1 or later is required.

- JDBC drivers required by the DBMS must be installed on the Hadoop cluster. The JDBC drivers are for the DBMS to which SAS Data Loader for Hadoop users need access.

**Note:** The version of JDBC driver must be supported by Sqoop.

Optionally, you may also install and configure Kerberos, which is not supported in combination with MapR.
Note: If the Hadoop cluster is secured using Kerberos, then the vApp must be configured for Kerberos.

For more information about configuring Hadoop cluster components, refer to the SAS 9.4 In-Database Products: Administrator’s Guide.

Server

Operating System
AIX, HP IPF, Linux for x64, Oracle Solaris SPARC, Oracle Solaris for x64, Windows 32-bit server or workstation, and Windows for x64 server or workstation.

SAS Data Loader for Hadoop vApp

vApp Client Host Environment
The client host for SAS Data Loader 2.3 for Hadoop must meet the following hardware and software requirements:

Note: If the Hadoop cluster is secured using Kerberos, then the vApp must be configured for Kerberos.

Software
SAS Data Loader 2.3 for Hadoop.

Hardware
- System memory (RAM): Minimum 8 GB, but 16 gigabytes or more is recommended. The SAS Data Loader virtual machine requires at least 4 GB of available memory.
- Disk space: At least 30 GB of free hard-drive space.
- BIOS: Must be enabled for virtualization technology.
- Processors: At least 2 cores (4 logical processors), but 4 core (8 local processors) or more is recommended.

Operating System
64-bit Windows 7 or later, or Windows Server 2008 R2 or later.

Hypervisor
- VMware Player Pro version 6 or 7.
- Virtual Network Configuration Network Address Translation (NAT)

Web Browsers
- Web browsers, without Kerberos security: Windows Internet Explorer 9 or later, Mozilla Firefox 14 or later, or Google Chrome 21 or later.
- Web browsers, with Kerberos security: Mozilla Firefox 14 or later, or Google Chrome 21 or later.