A-VIEW

Server Prerequisites (For v 4.0)

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A-VIEW Server Prerequisites

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**Software Requirements**

This section describes the details of software that are required to run A-VIEW server. A-VIEW Technical Support team will help install these as part of the setup/configuration process.

* Java JDK/JRE7.21
* .NET Framework 3.5SP1
* Adobe flash player plug-in & ActiveX
* Visual C++ redistributable x64
* SQLYog
* MySQL Server 5.5.16
* Adobe Reader 9
* Apache Tomcat 7.0.41
* Apache Web Server 2.4.2 with PHP5.4.3
* Adobe Media Server Professional 5 64 bit [[1]](#footnote-2)
* Print2Flash Commercial 3.5[Server Mode] 64 bit [[2]](#footnote-3)
* MSOffice2010/2013 Professional or Enterprise Edition[[3]](#footnote-4)

**Operating System Requirements:**

The recommended OS type and versions are:

* Microsoft® Windows Server® 2008 R2 (64 bit) is required mainly for Content Server. Java Server / Streaming Server / DB server also can also be deployed in Microsoft® Windows Server® 2008.
* Ubuntu 12.04 / 14.04 LTS (64bit) can be used for Java Server / Streaming Servers. - Needed only in the case of *Deployment Scenario Band C* mentioned under Hardware requirements.

**Hardware Requirements:**

A-VIEW Servers can be deployed in three different scenarios based on the load and availability of hardware/software and various other factors mentioned under each of the scenarios.

**Deployment Scenario A: Consolidated Configuration (All-In-One Windows)**

This is the easiest deployment scenario, this is recommended for a limited number of concurrent users who will be accessing the service, causing a moderate load on the server. The below given spec for this scenario supports around 150 A-VIEW users under normal condition, it can withstand more number of A-VIEW users if the hardware spec is upgraded.

All server software (Java Server / Streaming / Database server) and related services will be deployed in a single Windows computer. The Content server will be deployed in a single Windows computer. As there is only server for each role, this configuration does not provide built-in failover capabilities.

|  |  |  |  |
| --- | --- | --- | --- |
| **Servers** | **Operating System** | **Hardware Specification** | **Number of instances** |
| **Video Server / Database Server / Java Web/Proxy Server/Content Server** | Microsoft® Windows Server® 2008 R264bit | * 3.2-GHz Intel® Xeon® Quad Core processor, 32GB RAM, 2x1GB NIC * 1 TB or Higher SAN Storage OR Local SAS HDD (with RAID) | 1 |

**Deployment Scenario B: Consolidated Configuration (Ubuntu + Windows)**

Java Server / Streaming / Database server software and related services will be deployed in a single Ubuntu computer. The Content server will be deployed in a single Windows computer.

The scenario is also recommended for a limited number of concurrent users who will be accessing the service, causing a moderate load on the server. This setup can withstand more number of concurrent users compared to Scenario A as we can balance the load on server. Also, we have noted that performance is better for video streaming and database interactions in Linux, compared to Windows. Also, Linux servers provide more security, Content server can be given local IP and we can restrict its access to internet.

|  |  |  |  |
| --- | --- | --- | --- |
| **Servers** | **Operating System** | **Hardware Specification** | **Number of instances** |
| **Video Server / Database Server / Java Web/Proxy Server** | Ubuntu 12.04 / 14.04 LTS 64bit | * 3.2-GHz Intel® Xeon® Quad Core processor, 32GB RAM, 2x1GB NIC * 1 TB or Higher SAN Storage OR Local SAS HDD (with RAID) | 1 |
| **Content Server** | Microsoft® Windows Server® 2008 R264bit | * 3.2-GHz Intel® Xeon® Quad Core processor, 8GB RAM, 2x1GB NIC * 1 TB or Higher SAN Storage OR Local SAS HDD (with RAID) | 1 |

**Deployment Scenario C: Expanded Configuration**

In this case services are deployed in multiple physical servers/ virtual machines. A rack/blade server array is recommended in this kind of scenario.

This scenario provides the below advantages over the other two scenarios:

1. Can support a large number of concurrent users.

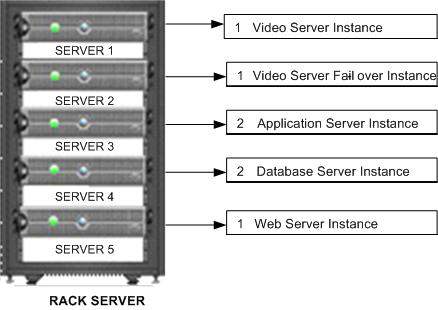
2. Scalability - We can add more video servers and split network bandwidth among them to connect more number of users.

3. Easy failover - We can have multiple servers for each of the categories and do failover whenever needed.A-VIEW Administrator can select the suitable failover servers for video servers andcontent server from Administration page of A-VIEW client application. In case of Database server, since it is configured as master-slave, failover will be done automatically.

4. Use cases such as to deploying Database/Java server at university/head quarters and Video and Content servers locally at colleges/organizations for accessing over LAN or conducting intra campus sessions.

Below are the server hardware configurations for this scenario.

|  |  |  |  |
| --- | --- | --- | --- |
| **Servers** | **Operating System** | **Hardware Specification** | **Number of instances** |
| **Video Server (s)** | Ubuntu 12.04 / 14.04 LTS 64bit | * 3.2-GHz Intel® Xeon® Quad Core processor, 64GB RAM, 2x1GB NIC * 1TB or Higher SAN Storage / Local SAS HDD (with RAID) | 2 |
| **Content Server** | Microsoft® Windows Server® 2008R2 64bit | * 3.2-GHz Intel® Xeon® Quad Core processor, 8GB RAM, 2x1GB NIC | 2 |
| **Database Server / Java Web Server (Master-slave configuration)** | Ubuntu 12.04 / 14.04 LTS 64bit | * 2 x 3.2-GHz Intel® Xeon® Quad Core processor, 8GB RAM, 2x1GB NIC * 1TB or Higher SAN Storage / Local SAS HDD (with RAID) | 2 |
| **Proxy Server** | Ubuntu 12.04 / 14.04 LTS 64bit | * 3.2-GHz Intel® Xeon® Quad Core processor, 8GB RAM, 2x1GB NIC * 1TB or Higher SAN Storage / Local SAS HDD (with RAID) | 2 |



**Streaming Server**

**Content Server**

**Database Server**

**Web Server**

**Fail-Over Server**

**Multi Server Instances**

**Minimum Storage Requirement**

2TB SAN Storage with RAID5 (HP P4500 G2 / IBM SAN24B-4 Express / Equal Logic PS6500E iSCSI SAN Storage OR Similar)

**Annexure 1: Required Ports & Protocols**

**The following ports and protocols are required to run A-VIEW Server**

|  |  |
| --- | --- |
| **Protocols** | **Ports** |
| TCP | 80, 8080, 2605 |
| RTMP | 1935 |

**The following ports and protocols are required to run A-VIEW Client**

|  |  |
| --- | --- |
| **Protocols** | **Ports** |
| TCP | 80, 8080 |
| RTMP | 1935 |

**Annexure 2: Application Software per License cost**

**Application Software Per License Cost\*.**

* Adobe Media Server Professional 564-bit - 2.8 Lakh INR
* Print2Flash Commercial 3.4 [Server Mode] 64-bit - 36,000 INR
* Microsoft Office 2010 Professional Plus 64 bit - 15,000 INR

**Optional Software**

* ISpringPowerPoint to Flash SDK 5.7.0 64-bit(Animation support during slide presentations)- 5,980 USD (3,22,920 INR) 2Developer + 2 Production Licenses

**\* The given cost is an approximation only. Prices may vary according to the license schemes and types.**

1. See Footnote 3. [↑](#footnote-ref-2)
2. See Footnote 3. [↑](#footnote-ref-3)
3. Trial licenses can be used for these software products for developer testing / validation. 1 copy of the license is required at a minimum. The approximate pricing details are given in Annexure 1. [↑](#footnote-ref-4)