Zap Business Intelligence

Technical Specifications

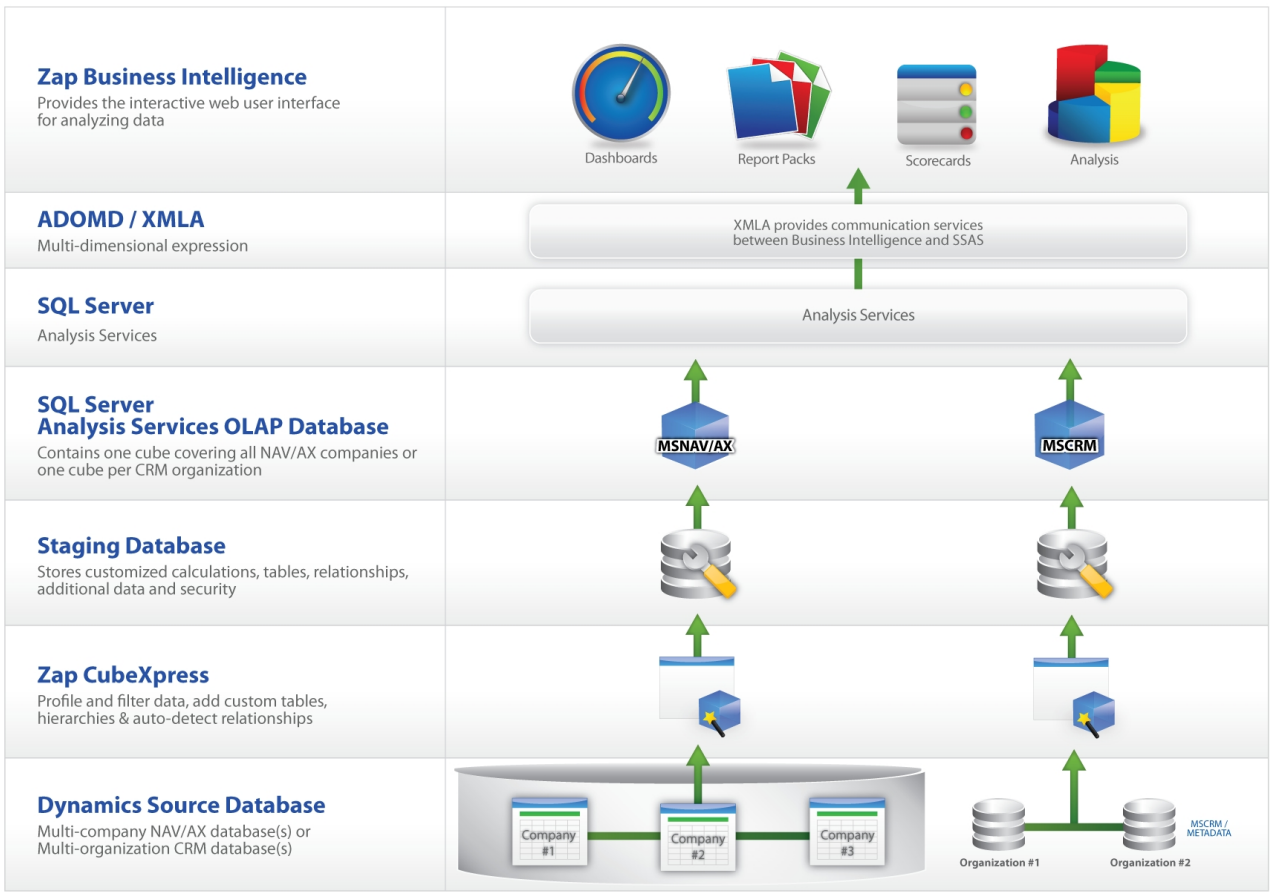
Deployment and Integration

- The zero footprint web architecture ensures no intrusion on your users' computers.
- Use Zap CubeXpress to bring in Microsoft Dynamics® customizations and replicate security.
- View analytics via Outlook®, export to Excel®, or integrate with SharePoint®, as well as Microsoft Dynamics AX, CRM, or NAV and generic SQL Server databases

Technology

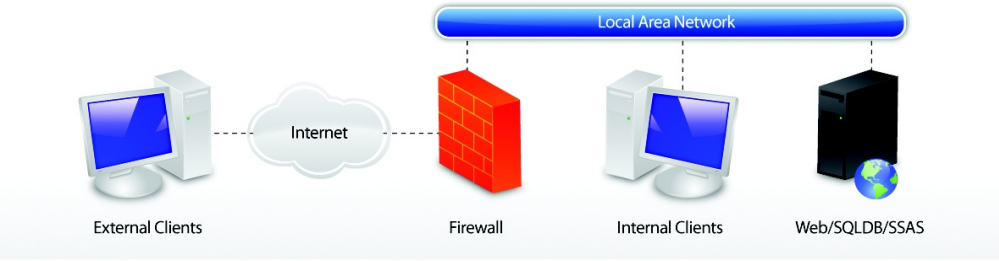
- 100% Microsoft technology, minimizing the skills and resources you need to deploy analytics.
- Specifically designed to minimize network bandwidth usage.
- Highly scalable from one to thousands of users. Suitable for SMEs through to enterprise.

Architecture >>



Deployment Specifications – All-In-One Option

» Using One Server *–Installing on a single server is suitable for small and medium-sized enterprises. The All-In-One server hosts the Database Engine server (Staging database), Analysis Services server (Zap cube/s), and IIS server (Zap BI application).*



Hardware: SQL Server / Analysis Server / IIS Server

Source Database	Small: < 50 GB	Medium: 50-100 GB	Large: >100 GB
Processor[1]	1x2 Ghz Xeon Quad Core	1x2 Ghz Xeon Quad Core	Please consult your Zap Partner
Memory[2]	>= 8 GB	>= 16 GB	Please consult your Zap Partner
Storage[3]	Range: < 5.5 to 20 GB	Range: 8 GB to 55 GB	Please consult your Zap Partner

Notes for Hardware:

1. The number of CPUs is directly proportional to the number of users using Zap Business Intelligence. Please refer to the scalability testing document for Zap Business Intelligence 2011 SP1.
2. Memory usage is directly affected by the cube structure and the amount of data being migrated into the OLAP cube. Ensure memory has been well allocated to each engine. Zap highly recommends configuring the 'Maximum Server Memory' setting of the DBE server to use half of the total server memory. To utilize more than 4 GB of memory, the 64-bit versions of Windows Server and SQL Server are required.
3. Zap's standard Staging database is on average between 15% and 30% of the size of the source database. Zap systems that are highly customized (additional tables added from your Dynamics DB or other data source) can see the Staging database grow to 50% of the source database. Zap's standard SSAS cube's size varies between 10% and 25% of the size of its standard Staging database. Storage sizes quoted include both the Zap Staging DB and the SSAS cube.

Software

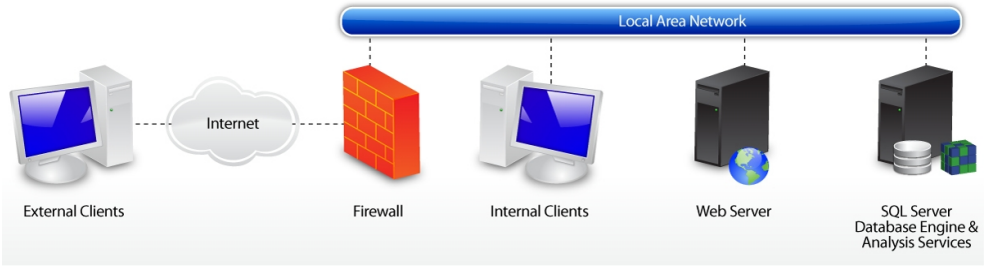
Server Operating System	Windows® Server 2003 / 2008 / 2008 R2 **(Recommended: 2008 or above)**
SQL Server Version	SQL Server 2005 SP3/ 2008 SP1 / 2008 R2 **(Recommended: 2008 or above)**
Internet Information Services	IIS 6 / 7
Microsoft .NET Framework	4 (This is installed by the Zap BI installation on the IIS server.)

Other Notes:

- Zap highly recommends applying the latest service packs to your Windows Server and SQL Server / Analysis Services software installations. The minimum SQL Server version required for Analysis Services is SQL Server 2005 SP3 or 2008 SP1, and for the Database Engine: SQL Server 2005 RTM.
- To utilize more than 4 GB of memory, the 64-bit versions of Windows Server and SQL Server are required.
- SQL Server Enterprise Edition is required for the following: multi-lingual installations, and implementations requiring multi-currency support. Additionally, the Enterprise Edition is recommended for medium-to-large Zap systems.

Deployment Specifications – Distributed Option 1

» Using Two Servers – This distributed environment has separate environments for the Database Engine (Zap Staging database), Analysis Services server (Zap cube/s), and the IIS server (Zap BI application). Because this environment supports more users than the All-In-One option, it is the recommended option for large organizations with larger user counts.



Hardware-Server 1: SQL Server / Analysis Server

Source Database	Small: < 50 GB	Medium: 50-150 GB	Large: >150 GB
Database Engine Server (Staging Database)			
Processor[1]	1x2 GhZ Xeon Quad Core	2x2+ GhZ Xeon Quad Core	>=4x2+ GhZ Xeon Quad Core
Memory[2]	>=8 GB	Range: 12 to 16 GB	Range: 16 to 32 GB
Storage[3]	Range: <5 to 15 GGB	Range: 15 to 45 GB	Range: 45 to 100+ GB
Analysis Services Server (Zap Cube/s)			
Storage[3]	Range: <500 MB to 4 GB	Range: 4 to 15 GB	Range: 15 to 50+ GB

Hardware-Server 2: IIS Server (Zap BI Application)

User Count	Small: 0-50 users	Medium: 50-200 users	Large: >200 users
Processor[1]	1x2 GhZ Xeon Quad Core	2x2+ GhZ Xeon Quad Core	>=4x2+ GhZ Xeon Quad Core
Memory[2]	>=4 GB	>=8 GB	Range: 8 to 16GB
Storage	100 MB	100 MB	100 MB

Notes for Hardware:

1. The number of CPUs is directly proportional to the number of users using Zap Business Intelligence. Please refer to the scalability testing document for Zap Business Intelligence 2011 SP1. Consider adding additional processor/s in higher user-count scenarios.
2. Memory usage is directly affected by the cube structure and the amount of data being migrated into the OLAP cube. Ensure memory has been well allocated to each engine. Zap highly recommends configuring the 'Maximum Server Memory' setting of the DBE server to use half of the total server memory. To utilize more than 4 GB of memory, the 64-bit versions of Windows Server and SQL Server are required.
3. Zap's standard Staging database is on average between 15% and 30% of the size of the source database. Zap systems that are highly customized (additional tables added from your Dynamics DB or other source database) can see the Staging database grow to 50% of the source database. Zap's standard SSAS cube's size varies between 10% and 25% of the size of its standard Staging database. Storage sizes quoted include both the Zap Staging DB and the SSAS cube.

Software

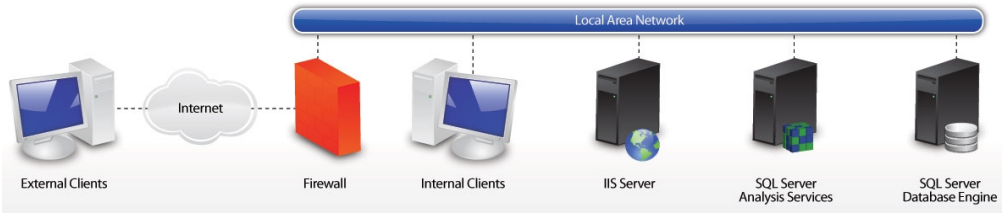
Server Operating System	Windows® Server 2003 / 2008 /2008 R2 **(Recommended: 2008 or above)**
SQL Server Version	SQL Server 2005 SP3/ 2008 SP1 / 2008 R2 **(Recommended: 2008 or above)**
Internet Information Services	IIS 6 / 7
Microsoft .NET Framework	4 (This is installed by the Zap BI installation on the IIS server.)

Other Notes:

- Zap highly recommends applying the latest service packs to your Windows Server and SQL Server / Analysis Services software installations. The minimum SQL Server version required for Analysis Services is SQL Server 2005 SP3 or 2008 SP1, and for the Database Engine: SQL Server 2005 RTM.
- To utilize more than 4 GB of memory, the 64-bit versions of Windows Server and SQL Server are required.
- SQL Server Enterprise Edition is required for the following: multi-lingual installations, and implementations requiring multi-currency support. Additionally, the Enterprise Edition is recommended for medium-to-large Zap systems.

Deployment Specifications – Distributed Option 2

» Using Three Servers –*This distributed environment has three separate environments for the Database Engine (Zap Staging database), Analysis Services server (Zap cube/s), and the IIS server (Zap BI application). Because this environment supports more users than the All-In-One option, it is the recommended option for large organizations with many users, which are looking for the most scalable and responsive architecture.*



Hardware - Server 1: SQL Server (Zap Staging DB)

Source Database	Small: < 50 GB	Medium: 50-150 GB	Large: >150 GB
Processor[1]	1x2 GhZ Xeon Quad Core	2x2+ GhZ Xeon Quad Core	>=4x2+ GhZ Xeon Quad Core
Memory[2]	>=8 GB	Range: 12 to 16 GB	Range: 16 to 32 GB
Storage[3]	Range: <5 to 15 GB	Range: 15 to 45 GB	Range: 45 to 100+ GB

Hardware - Server 2: Analysis Services Server (Zap Cube/s)

Source Database	Small: < 50 GB	Medium: 50-150 GB	Large: >150 GB
Processor[1]	1x2 GhZ Xeon Quad Core	2x2+ GhZ Xeon Quad Core	>=4x2+ GhZ Xeon Quad Core
Memory[2]	>=4 GB	Range: 8 to 12 GB	Range: 12 to 32+ GB
Storage[3]	Range: <500MB to 4 GB	Range: 4 GB to 15 GB	Range: 15 GB to 50+ GB

Hardware - Server 3: IIS Server (Zap BI Application)

User Count	Small: 0-50 users	Medium: 50-200 users	Large: >200 users
Processor[1]	1x2 GhZ Xeon Quad Core	2x2+ GhZ Xeon Quad Core	>=4x2+ GhZ Xeon Quad Core
Memory[2]	>=4 GB	>=8 GB	Range: 8 to 16GB
Storage	100 MB	100 MB	100 MB

Notes for Hardware:

1. The number of CPUs is directly proportional to the number of users using Zap Business Intelligence. Please refer to the scalability testing document for Zap Business Intelligence 2011 SP1. Consider adding additional processor/s in higher user-count scenarios.
2. Memory usage is directly affected by the cube structure and the amount of data being migrated into the OLAP cube. Ensure memory has been well allocated to each engine. Zap highly recommends configuring the 'Maximum Server Memory' setting of the DBE server to use half of the total server memory. To utilize more than 4 GB of memory, the 64-bit versions of Windows Server and SQL Server are required.
3. Zap's standard Staging database is on average between 15% and 30% of the size of the source database. Zap systems that are highly customized (additional tables added from your Dynamics DB or other source database) can see the Staging database grow to 50% of the source database. Zap's standard SSAS cube's size varies between 10% and 25% of the size of its standard Staging database. Storage sizes quoted include both the Zap Staging DB and the SSAS cube.

Software

Server Operating System	Windows® Server 2003 / 2008 /2008 R2 **(Recommended: 2008 or above)**
SQL Server Version	SQL Server 2005 SP3/ 2008 SP1 / 2008 R2 **(Recommended: 2008 or above)**
Internet Information Services	IIS 6 / 7
Microsoft .NET Framework	4 (This is installed by the Zap BI installation on the IIS server.)

Other Notes:

- Zap highly recommends applying the latest service packs to your Windows Server and SQL Server / Analysis Services software installations. The minimum SQL Server version required for Analysis Services is SQL Server 2005 SP3 or 2008 SP1, and for the Database Engine: SQL Server 2005 RTM.
- To utilize more than 4 GB of memory, the 64-bit versions of Windows Server and SQL Server are required.
- SQL Server Enterprise Edition is required for the following: multi-lingual installations, and implementations requiring multi-currency support. Additionally, the Enterprise Edition is recommended for medium-to-large Zap systems.

Virtualization

When using virtualization products such as Microsoft Hyper-V or VMware, the following issues should be considered to ensure that your Zap Business Intelligence and CubeXpress installations perform as expected.

Zap recommends Microsoft Hyper-V, with the inclusion of the new Dynamic Memory in Server 2008 R2 SP1, as the preferred virtualization software. All Zap Technology products are developed and tested using Microsoft Hyper-V.

The virtual host server must comply with specifications sufficient for the role it is about to undertake (no different to defining server specifications for any other server role's workload):

- Ensure that the virtualization host's disk configuration is compliant with the intended load of the guest virtual machines it will host:
  - Zap recommends RAID0+1 for production and RAID5 for development virtual host systems.
  - Failing to use enterprise-level hardware to support the storage needs of your virtual environment can have disastrous effects on virtual machine performance.
  - As a virtual machine administrator, find out what disk subsystem is in place. This is particularly true for managed service environments.
- Find out how much RAM your virtual machine can actually access. With some virtualization software, this may differ from what Windows reports.
- Do not use oversubscription techniques provided by virtualization software vendors to the point of overcommitment. This can prevent a guest server's ability to get real access to its memory allocation:
  - Oversubscription enables a virtual host administrator to assign more memory than the physical host has, in an effort to increase host memory utilization by balancing the host memory load.
  - Overcommitment occurs when you have oversubscribed too far and the host cannot service the commitments for memory allocation.

Tip: When using virtualization for Zap Business Intelligence for a large number of users, it may be better to scale horizontally into a web farm with less virtual memory (minimum 4 GB) assigned to each node, than trying to scale vertically by adding lots of virtual memory to a single web server.

Today's enterprise-level virtualization technology now gets you almost as close to the bare metal as a native operating system. This means that a virtual machine can perform just as well as a physical server as long as you adhere to the above recommendations.

Citrix / Terminal Services

When deploying the Zap Business Intelligence solution in a Citrix or Terminal Services-based architecture, Zap supports the following browser versions:

- Microsoft Internet Explorer® 9 **(IE 8 not supported)**
- Google Chrome® 8 and above (stable version)
- Apple Safari® 5 and Mobile Safari® 4 (iPad)

Requirements – Client PC for Zap Business Intelligence

Hardware

100 MB must be available for the browser PC.

Software

PDF (for printing)	Adobe Reader 7.0 or newer
Browser	■ Microsoft Internet Explorer® 8 / 9 **(Strongly recommended: IE 9)** ■ Google Chrome® 8 and above (stable version) ■ Apple Safari® 5 and Mobile Safari® 4 (iPad)
Microsoft Office Excel (if exporting)	2003 and above

Requirements – Zap CubeXpress

Hardware

Minimal resources are required; CubeXpress only consumes resources when new data is migrated or source system metadata is read.

Software

Operating System	Windows XP®, Windows Vista®, Windows 7®, Windows Server 2003/ 2008 SP1 / 2008 R2
Microsoft .NET Framework	4 (This is installed by the Zap BI installation on the IIS server.)
Source Databases	If using databases from Microsoft Dynamics, the following versions are supported: ■ CRM: 3.0 / 4.0 / 2011 ■ NAV: 4.0 / 5.0 / 2009 ■ AX: 4.0 / 2009 / 2012 If using generic SQL Server databases, the following versions of SQL Server are supported: ■ SQL Server 2005 SP3 or later ■ SQL Server 2008 SP1 or later
Microsoft Dynamics AX .NET Business Connector	Required for all Zap deployments on AX 4.0 and AX 2009. This must be installed on the same machine as Zap CubeXpress.

Note: CubeXpress requires administrative privileges to install.

Microsoft Partner
Gold Business Intelligence
Gold Data Platform
Gold Independent Software Vendor (ISV)

Microsoft Partner
Silver Enterprise Resource Planning
Silver Customer Relationship Management

Microsoft Partner Network
2009 ISV/SOFTWARE SOLUTIONS PARTNER OF THE YEAR
Innovation
Winner
2010 COUNTRY PARTNER OF THE YEAR
Australia
Winner