TKSQL, iBrowse, and TimeKeeper Analytics

System Requirements

TK 5.14.01 SP02
iBrowse 2014.06 SP02

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Contents

1. Overview

This document itemizes system requirements for Synerion's Time and Attendance products (TKSQL, iBrowse, TimeKeeper Analytics).

This document describes how all products are installed in one (dedicate) server. However, additional deployment possibilities are possible, up to five servers (in distributed mode).

These are itemized here.

IMPORTANT: TimeKeeper Analytics is not supported with:

- Domain Controllers
- EBS (Windows Essential Business Server), Windows MultiPoint Server, Windows Home Server
- MS Exchange Server

2. Prerequisites

Section	Recommended	Applicable Products
Server Requirements	The user running the Synerion COM + Application/Identity for Application Pool must be assigned to local admin permissions	iBrowse/TimeKeeper Analytics
Client Requirements	For Windows 7 installations, In order to run the system, a regular user should be defined at the workstation from the domain with the default permissions, not including administrator privileges. Reading/writing permissions are needed for the system folder. In order to install or perform registration, Administrator permissions are required.	TKSQL
IIS Server Requirements for Deployment of TKSQL/iBrowse/TimeKeeper Analytics in Distributed Infrastructures	The user running the Synerion COM+ Application must be assigned to local admin permissions. For those who want to implement SSO The user must be a member of the domain	TimeKeeper Analytics and iBrowse

3.Server Requirements

	Minimum	Recommended	Applicable Products
Processor	Dual-Core Intel® Xeon® Processor 1.8 GHz *For virtual servers (VMware, Hyper-V) minimum 2 cores is required.	Quad-Core Intel® Xeon® Processor 1.8 GHz	All
Memory	4 GB	8GB	All
Hard Disk Free Space [1]	40 GB	100 GB	All (TimeKeeper Analytics needs 100 GB)
Operating System [2]	• MS Windows Server 2008 Standard 32 bit/ 64 bit • MS Windows Server 2008 R2 Standard • Windows Small Business Server 2008 R2 • Windows Server 2012		All
SQL Database	• MS SQL Server 2005 Standard Edition x86/x64 • MS SQL Server 2008 Standard Edition x86/x64 • MS SQL Server 2008 R2 Standard Edition x64 [3] • MS SQL Server 2012 Standard Edition • MS SQL Server 2012 Express Edition (TKSQL and iBrowse only)		All
	Analysis Services/Integration Services		TimeKeeper Analytics
SQL Server Collation	Case Insensitive-Accent Sensitive		All

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[1] Additional disk space may be required according to the size of the customer's site
[2] See Appendix A: HASP4 and HASP5 Drivers Supported Operating Systems
[3] See Appendix B: Server Requirements for SQL Express

	Minimum	Recommended	Applicable Products
Additional Components	**.NET Framework** Version 3.5 SP1		iBrowse/TimeKeeper Analytics
	IIS 7/7.5		iBrowse/TimeKeeper Analytics
	.NET Extension Microsoft ASP.NET 2.0 AJAX Extensions 1.0		iBrowse
	SQL Server 2005 ADOMD		TimeKeeper Analytics
	SQLXML4		TimeKeeper Analytics

4. Client Requirements

	Minimum	Recommended	Applicable Products
Processor	Pentium 4 3.0 GHz	Intel® Core™ 2 DUO 2.93 GHz	TKSQL
Memory	• Windows XP—512 MB • Vista and Windows 7—2 GB	• Windows XP—1 GB • Vista and Windows 7—2 GB	
Screen [4]	VGA or higher resolution		
Operating System [5]	• MS Windows XP • MS Windows Vista • Windows 7, 32- or 64-bit • Windows Terminal Server • Windows 8 (new for this release)		
Data Components for OS	MDAC 2.6 or greater		
SQL Database	CAL license for every workstation, or additional license (i.e., license per processor)		
Default ANSI Code Page	1255 (ANSI – language according to region of client)		iBrowse/TimeKeeper Analytics
Browser	Internet Explorer 6 (and higher, including the recently released Internet Explorer 10)		iBrowse/TimeKeeper Analytics

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[4] For graphic tools, 800x600 resolution or higher is required
[5] See Appendix A: HASP4 and HASP5 Drivers Supported Operating Systems

5. IIS Server Requirements for Deployment of TKSQL/iBrowse/TimeKeeper Analytics in Distributed Infrastructures

This table describes the requirements for an IIS server for deployment scenarios of more than one server.

	Minimum	Recommended	Applicable Products
Processor	Dual-Core Intel® Xeon® Processor 1.8 GHz	Quad-Core Intel® Xeon® Processor 1.8 GHz	TimeKeeper Analytics and iBrowse
Memory	2 GB	4 GB	TimeKeeper Analytics and iBrowse
Hard Disk Free Space [6]	40 GB in addition to system needs		TimeKeeper Analytics and iBrowse
Operating System	• MS Windows Server 2008 Standard 32 bit/ 64 bit • MS Windows Server 2008 R2 Standard • Windows Server 2008 R2 Web		TimeKeeper Analytics and iBrowse
Additional Components	**Analysis Services/Integration Services**		TimeKeeper Analytics
	.NET Framework	3.5 SP1	TimeKeeper Analytics and iBrowse
	IIS 7/7.5		TimeKeeper Analytics and iBrowse
	.NET Extension Microsoft ASP.NET 2.0 AJAX Extensions 1.0		iBrowse
	SQL Server 2005 ADOMD		TimeKeeper Analytics
	SQLXML4		TimeKeeper Analytics

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[6] Additional disk space may be required according to the size of the customer's site.

Appendix A: HASP4 and HASP5 Drivers Supported Operating Systems

HASP		Supported Systems
HASP 4	Windows 32	Windows XP, 2003 Server, 2008 Server, Vista, Windows 7 32-bit
	Windows 64	Windows XP, 2003 Server, 2008 Server, Vista, Windows 7[7]
HASP 5	Windows 32	Windows XP, 2003 Server, 2008 Server, Vista, Windows 7
	Windows 64	Windows XP, 2003 Server, 2008 Server, 2008 Server R2, Vista, and Windows 7

Appendix B: Server Requirements for SQL Express

NOTE: *MS-SQL Server 2008 Express and MS-SQL Server 2008 R2 Express platforms are not intended for companies with more than 1,500 employees.*

See the following sections:

- Functional Limitations

- Additional Factors

B.1 Functional Limitations

- The MS‑SQL Server 2008 Express and MS‑SQL Server 2008 R2 Express platforms are not designed for more than two concurrent TKSQL users. Therefore, if additional future users are required, it will not be possible on the Express versions and a standard MS‑SQL Server version will be required.

- IBrowse is not supported on the MS‑SQL Server 2008 Express and MS‑SQL Server 2008 R2 Express platforms; therefore Employee Self Service and/or Manager Self Service functionality (i.e. updating and correcting Time & Attendance, TimeCosting, vacation requests, and reports) will not be available.

- MS‑SQL Server 2008 Express and MS‑SQL Server 2008 R2 Express do not support OLAP, and therefore both Timekeeper Analytics and TimeKeeper‑BI (OLAP Cubes) are not supported on the Express platforms.

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[7] HASP4 supports Windows 7 64-bit only in the NW plug

- MS‑SQL Server 2008 Express (64‑bit) and MS‑SQL Server 2008 R2 Express (64‑bit) do not support the conversion process from TK2000 to TKSQL.

- SQL Server Express Edition doesn't include the maintenance tools of the server (SQL Server Agent). Therefore, it is not possible to perform automatic backups. **Please arrange another automatic backup solution.**

B.2 Additional Factors

The technical aspects of these platforms are as follows:

Component	MS-SQL Server 2008 Express	MS-SQL Server 2008 R2 Express/2012	MS-SQL Server 2012
RAM	1	1	1
Processor	1	1	1
Database Size	4 GB	10 GB	10 GB

Note the following:

- The database size limits the amount of Time and Attendance historical data that can be maintained on the server and will require an SQL archiving solution on behalf of the customer's IT department.

- The RAM size is relevant even in environments where the server's memory is larger. This limitation might affect system performance, such as calculations and payroll exports.

- Since both platforms utilize only one processor (i.e. even if the server has more than one processor), certain services that are able to perform faster (i.e. run concurrently by utilizing multiple processors) will be limited to successive/serial work mode only.

- MS‑SQL Server 2008 Express and MS‑SQL Server 2008 R2 do not arrive with all client tools for managing SQL Server. This might extend the resolution time of SQL‑related support problems.

	Minimum	Recommended
Processor	AMD Opteron, AMD Athlon 64, Intel Xeon with Intel EM64T support, Intel Pentium IV with EM64T support	
Processor Speed	1.4 Ghz	1.4 Ghz
Memory	2 GB	2 GB
Hard Disk Free Space [8]	30 GB	50 GB

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[8] Additional disk space may be required according to the size of the customer's site.

	Minimum	Recommended
Operating System [9]	• MS Windows Server 2008 Standard 32 bit/ 64 bit • MS Windows Server 2008 R2 Standard • MS Windows Vista SP2 Enterprise x64 • MS Windows Vista SP2 Business x64 • MS Windows 7 x64 Ultimate • MS Windows 7 x64 Enterprise • MS Windows 7 x64 Professional • MS Windows Small Business Server 2008 R2	
SQL Database	• MS‑SQL Server 2008 R2 Express 32/64 bit	
Server Collation	Case Insensitive	

Appendix C: Anti-Virus Exclusions

Please ensure the following when installing/operating TKSQL on a server with an anti-virus program:

The following ports are open and available when connecting with the HASP key:

• For HASP 4: 475

• For HASP 5: 1947

The following services are permitted to run:

• For HASP 4: HASP Loader Service

• For HASP 5: Sentinel Local License Manager Service

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[9] See Appendix A: HASP4 and HASP5 Drivers Supported Operating Systems.

Appendix D: MS Office Versions Supported

The following table lists MS Office versions supported by for the Organizational Structure Web Application in HRM and the Synerion Direct application in WFM.

MS Office version	First TK version	First iBrowse
2003	5.07.01	2007.01
2007	5.09.01	2009.01
2010	5.11.01.SP03	2011.09.SP03
2013	5.13.01.SP01	2013.03.SP01