



RtDUET

SYSTEM REQUIREMENTS

Operating System

Server

Software Requirements

Hardware



Requirements + Recommendations

OPERATING SYSTEMS REQUIREMENTS

Microsoft Windows Server 2012:

- Windows Server 2012 R2
- Windows Server 2012

Microsoft Windows Server 2008, R2:

- Windows Server 2008 R2 SP1
- Windows Server 2008 SP2

NOTES:

- *Windows Servers are recommended for the Calculation engine and Web based client components.*
- *Microsoft client operating systems such as Windows 7 and Windows 8 can be used for the system and is typical for the toolkit installation.*
- *RtDUET is supported in virtualized environments with VMware.*

MICROSOFT + OTHER REQUIREMENTS

The RtDUET web interface requires the following to run:
Internet information services (IIS)

- IIS 8.5, Windows Server 2012 R2 and Windows 8.1
- IIS 8.0, Windows Server 2012 and Windows 8
- IIS 7.5, Windows Server 2008 R2

.Net Frameworks

- Microsoft .NET Framework 4.5
o <http://www.microsoft.com/en-ca/download/details.aspx?id=30653>
- Microsoft .NET Framework 4.0
o <http://www.microsoft.com/en-ca/download/details.aspx?id=17718>

Web Browser

- Internet Explorer IE9, IE10, IE11
o Internet Explorer can be run in compatibility mode.; Hit F12
- Google Chrome, Firefox

Please Note: The RtDUET web client does work in a SharePoint environment.

SQL SERVER REQUIREMENTS

Supported SQL Server editions

- Express
- Standard (**recommended**)
- Enterprise
- Datacenter

Supported SQL Server versions

- SQL Server 2012
- SQL Server 2008 32-bit x86 and 64-bit x64
- There is no support for the Itanium CPU.

Required SQL Server components

- Database engine
- SQL Agent (backup and replication)

OSISOFT SOFTWARE REQUIREMENTS

PI Server Supported Versions:

- PI Server 2015
- PI Server 2014
- PI Server 2012
- PI Server 2010 R3
- PI Server 2010 (and with SP1)
- PI Server 3.4.385.59
- PI Server 3.4.380 (and with SP1)
- PI Server 3.4.375.99

PI AF Server

- Version 2015 (AF 2.7)
- Version 2014 (AF 2.6)
- Access to Microsoft SQL Server 2008, or 2008 R2 (including SQL Express Editions).
Both 32-bit and 64-bit versions of Microsoft SQL Server are supported.

PI AF Client

- Version 2015 (AF 2.7)
- Version 2014 (AF 2.6)

PI SDK Versions

- 1.4.0.416
- 1.4.2.445

HARDWARE REQUIREMENTS

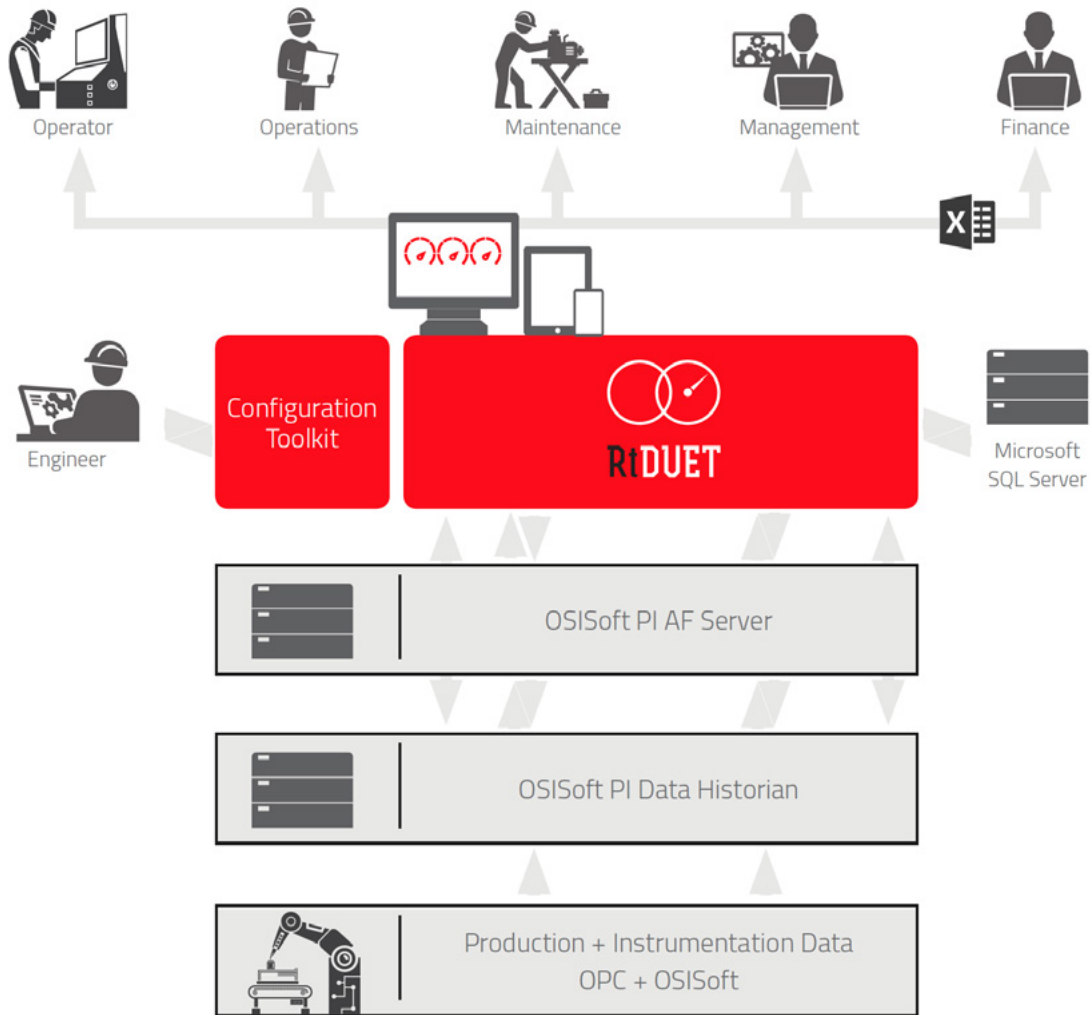
	Small	Medium		Large	Xlarge
Number of Assets	25	50	100	500	>500 *
Operating System	Server 2008 R2 (x64)				
RtDuet Calculation Engine	64 bit	64 bit	64 bit	64 bit	64 bit
CPU Speed (GHz)	2.4	2.4	2.4	2.4	2.8
Number CPUs	2	2	2	4	4
Effective Number of Processors	8	8	8	16	16
RAM (GB)	8	8	8	16	16
<p>Note: * Above 500 Assets a user may want to run the calculation engine in distributed mode. Having multiple services running on separate servers.</p>					
Operating System	Server 2008 R2 (x64) IIS Version 7.5				
RtDuet Client Server (Web Services, User Interface)	64 bit	64 bit	64 bit	64 bit	64 bit
CPU Speed (GHz)	2.4	2.4	2.4	2.4	2.4
Number CPUs	2	2	2	4	4
Effective Number of Processors	8	8	8	16	16
RAM (GB)	8	8	8	16	16

ARCHITECTURE

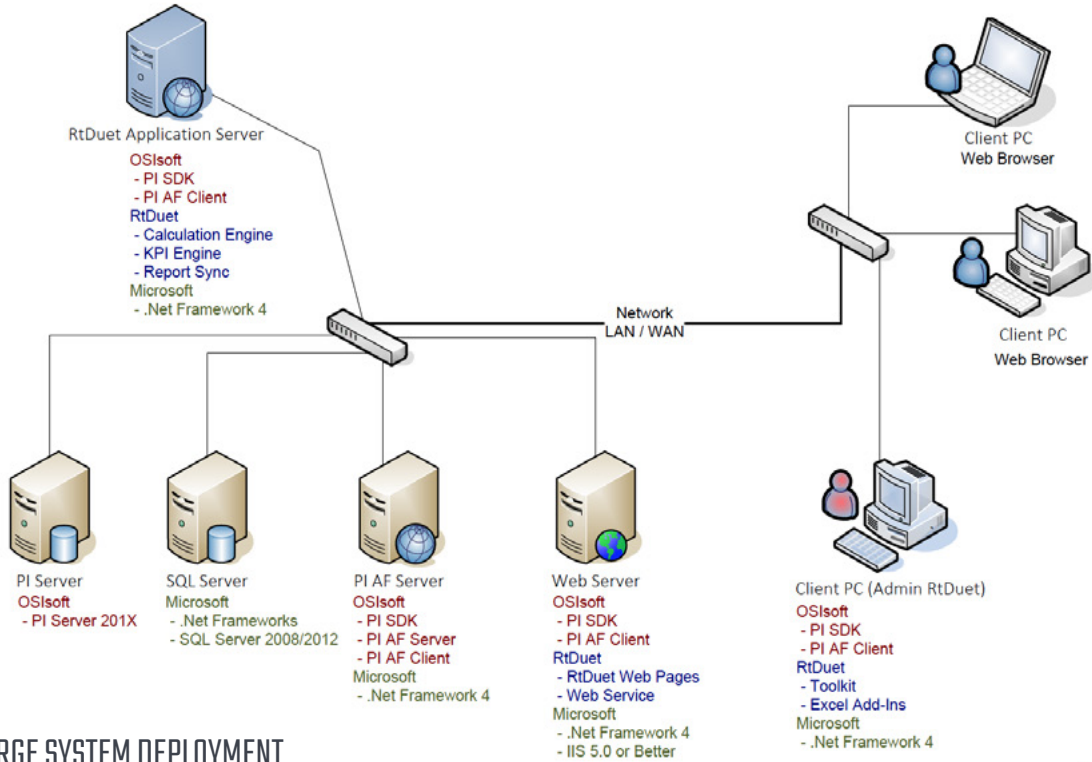
The RtDUET system components are built 100% on top of the OSIsoft PI System. The RtDUET system is modular by design with each component strictly built on top of the OSIsoft PI-SDKs.

RtDUET also provides easy access to the underlying data records for downtime events and KPI's through data access components which provides easy reporting and integration into on-site systems as shown in the blue below. Accessing this data can be achieved through standard acceptable reporting tools such as Microsoft Excel and Microsoft SQL Server reporting services. We also provide standard add-in applications for the Microsoft Excel 2007, 2010, and 2013 versions.

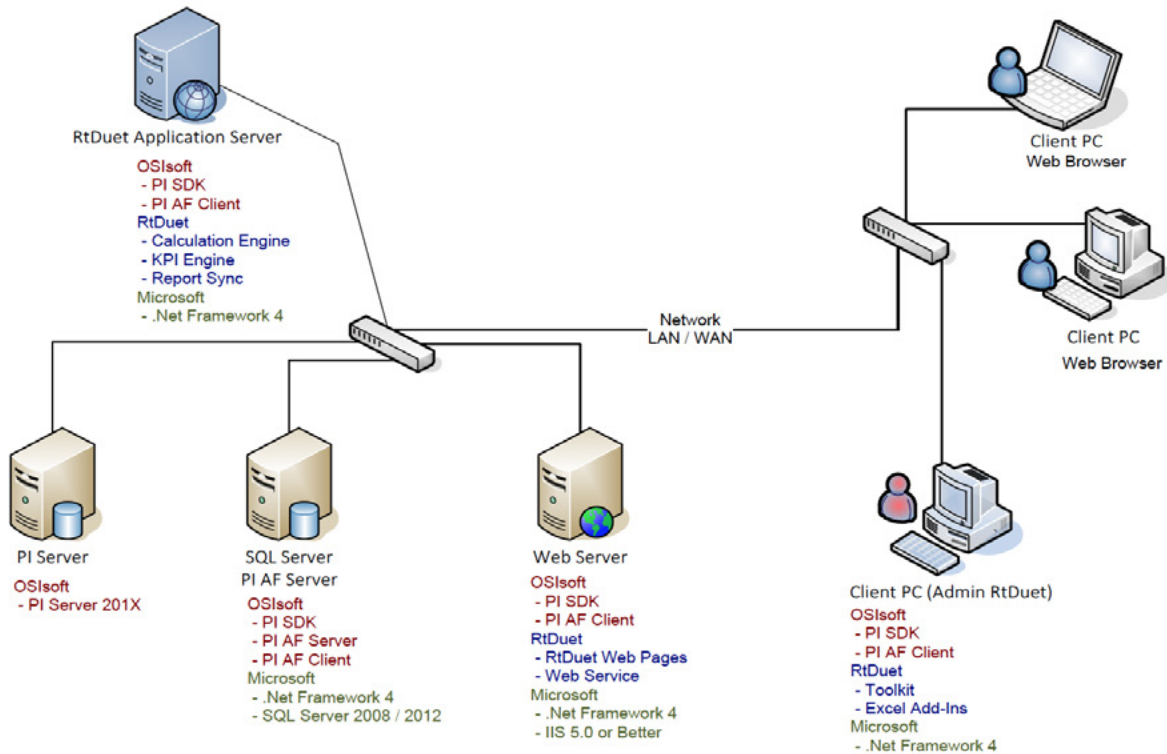
RtDUET utilizes the PI system data from tags as trigger inputs to all of our assets and it also utilizes the OSIsoft PI AF system for configuration and storage of downtime and KPI records in the event frame subsystem. The PI AF system is also used as a database for the reason tree and time usage model in addition to the machine center asset hierarchy.



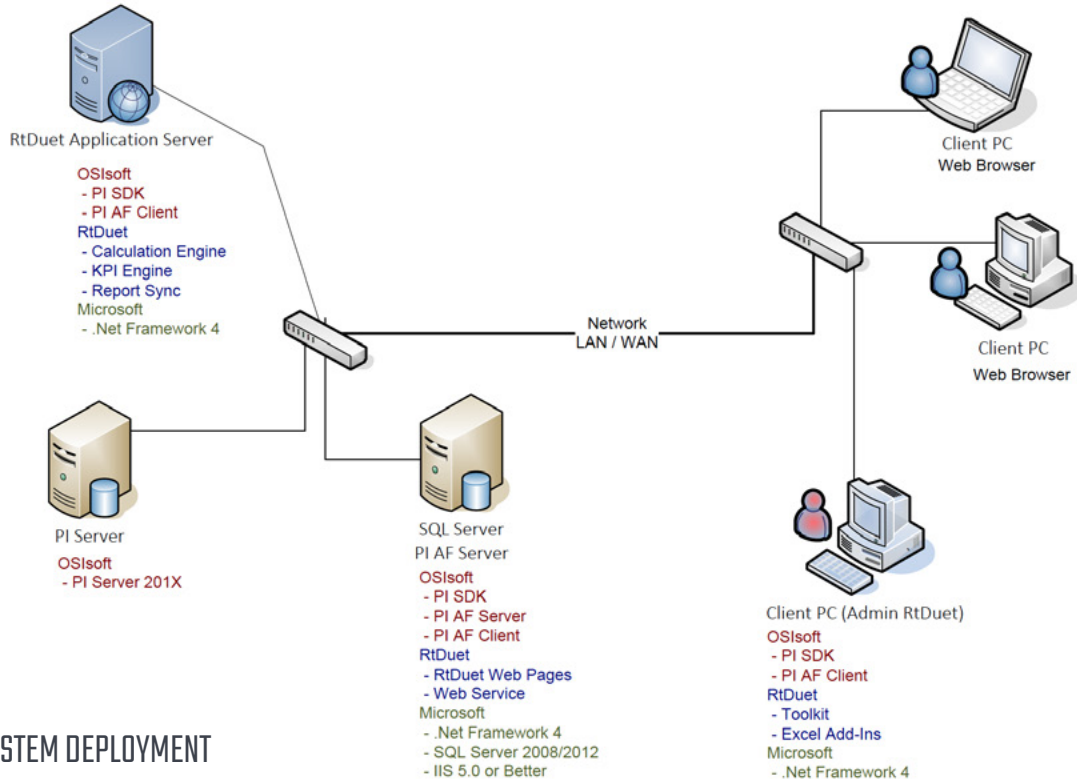
EXTRA LARGE SYSTEM DEPLOYMENT



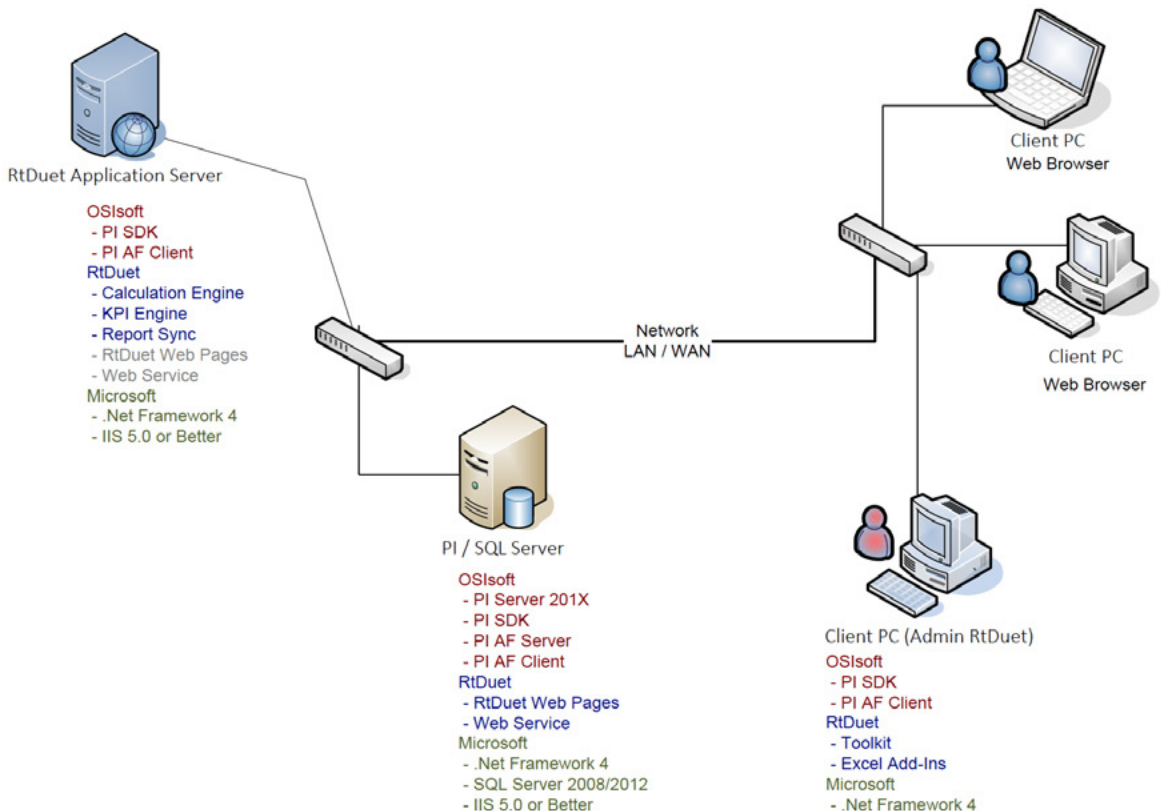
LARGE SYSTEM DEPLOYMENT



MEDIUM SYSTEM DEPLOYMENT



SMALL SYSTEM DEPLOYMENT



SINGLE SERVER SYSTEM DEPLOYMENT

