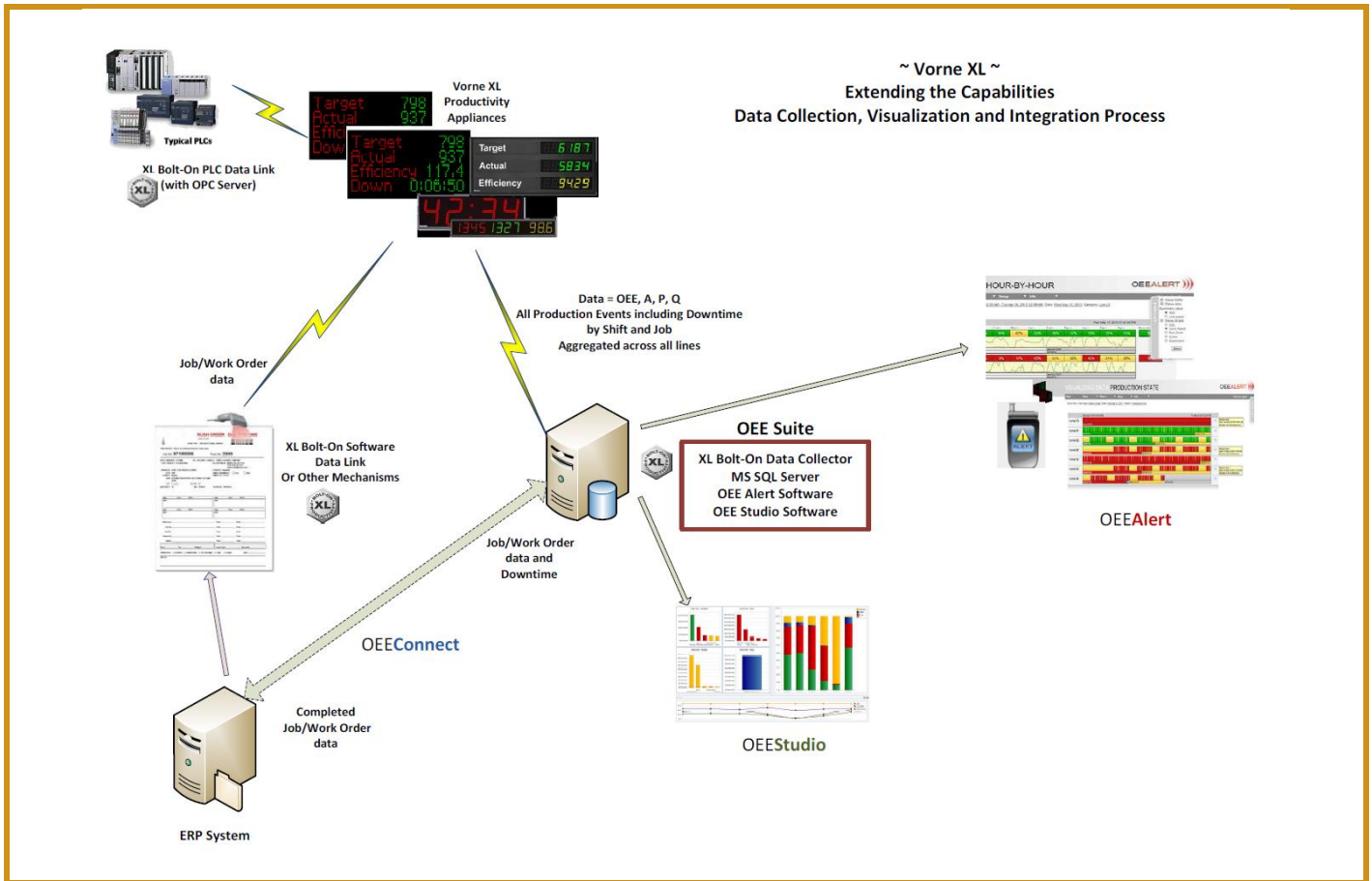


# Driven by Vetii | GROUP ~ Powered by Vorne

Extending the capabilities of the Vorne XL™ with Bolt-On Products and Services



❖ Factory Floor Display

❖ Email and SMS Alerts

❖ Integrates with ERP

❖ Enterprise Reporting

Providing out-of-the-box solutions that work directly with your Vorne XL(v1) Productivity appliances.

We'll have you up and running within a couple of hours visualizing your production data without the need for custom programming.

We've made it our mission to help facilitate process improvements through simplified data capture and analysis.

Real-Time	Tactical and Strategic	Contact
XL Bolt-On Data Link	XL Bolt-On Data Collector	1-800.975.3181
XL Bolt-On OPC Server	OEE Studio	Contact_vetii@VetiiGROUP.com
XL Bolt-On Display Viewer	OEE Connect – ERP Integration	www.vetiiGROUP.com
OEE Alert		www.vorne.com

Vorne XL Productivity Appliance is a trademark of Vorne Industries.

## Software Technical Specifications – XL Bolt-On Data Collector | OEE Alert | OEE Studio

	XL Bolt-On Data Collector	OEE Alert	OEE Studio
<b>Licensed</b> based on the number of Vorne XL units	Y	Y	Y
<b>HARDWARE REQUIREMENTS &amp; OPERATING SYSTEMS</b>			
<b>Supports Windows Operating Systems:</b> Windows 7, Windows 10, Windows Server 2012R2 or higher, with all of their current updates applied. The Services can run as local system as long as there are no expiring passwords. The full .NET Framework 4.0 or 4.5 is required	Y	Y	Y
<b>IIS Enabled</b> – Internet Information Services 7.0 or higher	n/a	Y	n/a
<b>Supported browsers:</b> IE11 or higher, Safari, Opera, Firefox or Google Chrome; with JavaScript enabled	n/a	Y	n/a
<b>Minimum Hardware requirements:</b> A server or computer capable of running Windows 7 or later. Recommend using a 64-bit processor with at least an Intel i3 processor and 8GB RAM. A minimum of 150GB hard drive space – mostly for the operating system.	Y	Y	Y
<b>PC can be patched</b> or scanned for virus without affecting the application	Y	Y	Y
<b>Front-end programming environment:</b> .NET Framework, C#, WinForms, JavaScript	Y	Y	Y
<b>Virtual Environments Supported:</b> VMWare or MS Hyper-V	Y	Y	Y
<b>CPU, Memory or Disk I/O Intense?</b> Loads are not typically intense unless the user explicitly requests large volumes of data.	Y	Y	Y
<b>SMTP Server</b> – information and any credentials for sending email/text alerts.	Y	Y	Y
<b>Application Update Frequency</b> – For normal features and functions, updates are provided free 2-3 times per year.	Y	Y	Y
<b>DATABASE</b>			
<b>Database Platform Supported:</b> Microsoft SQL Server 2012 R2 or higher and their respective Express versions, with SQL Server Management Studio.	Y	Y	Y
<b>Database Permissions Required: Mixed Mode Authentication required with SQL login db_owner</b> <ul style="list-style-type: none"> <li>• select • insert into • update • delete from • create table</li> <li>• create nonclustered index • alter table {table} add {column}</li> <li>• alter table {table} add constraint {key} primary key</li> <li>• drop table • begin transaction • commit • rollback</li> </ul>	Y	Y	Y
<b>Database Recovery Model = SIMPLE</b> and overwrite the backup files as the data does not need to be appended.	Y	Y	Y
<b>Initial Size of Database and expected growth</b> – Initial size of database (if 1-10 Vorne XL devices are harvested) will be about 10MB. The projected growth rate depends on the number of timeline event records collected for each Vorne XL device. Normal growth is usually less than 60 MB/device/year.	Y	n/a	n/a

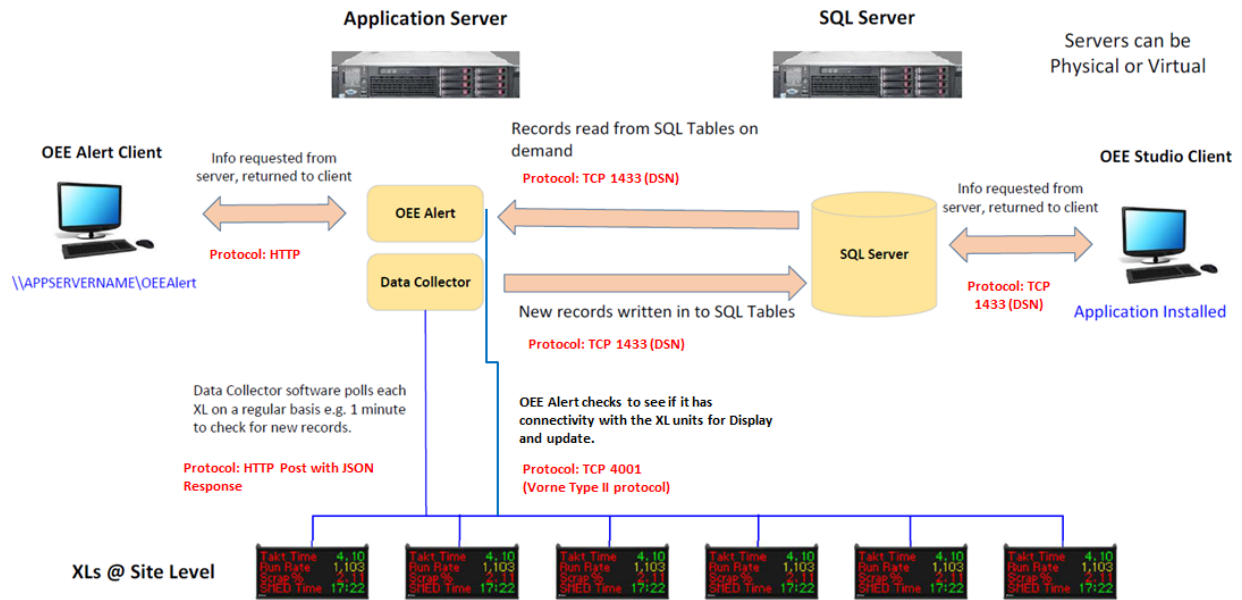
When a customer evaluates and/or purchases OEE Alert and/or OEE Studio, they need to have the XL Bolt-On Data Collector and Microsoft SQL Server. The Data Collector needs to be running at all times on a computer that should be dedicated for this purpose. The SQL Server can also be installed and running on the same computer. It is up to the customer to provide this computer. Where possible, we request unattended remote access to be able to support the plants in a timely manner.

The SQL Server Express can be downloaded free – using SQL Server Express 2014 or higher, or if the customer already is using a SQL Server for other parts of their business, we can see if they will let us install the Data Collector database on that server.

We offer a 35-day trial period of OEE Alert and/or OEE Studio along with the 35-day evaluation copy of the XL Bolt-On Data Collector. It still requires the same components and installation effort.

Please don't hesitate to contact us if you have additional questions.

# OEE Suite Infrastructure



If you are going to use a Load Balancer, then you need to configure it for TCP traffic.

Configuration interface for a load balancer, showing the **Listeners** tab. The following listeners are currently configured for this load balancer:

Load Balancer Protocol	Load Balancer Port	Instance Protocol	Instance Port	Cipher	SSL Certificate
TCP	80	TCP	80	N/A	N/A

**Edit** Need to use TCP protocol instead of HTTP