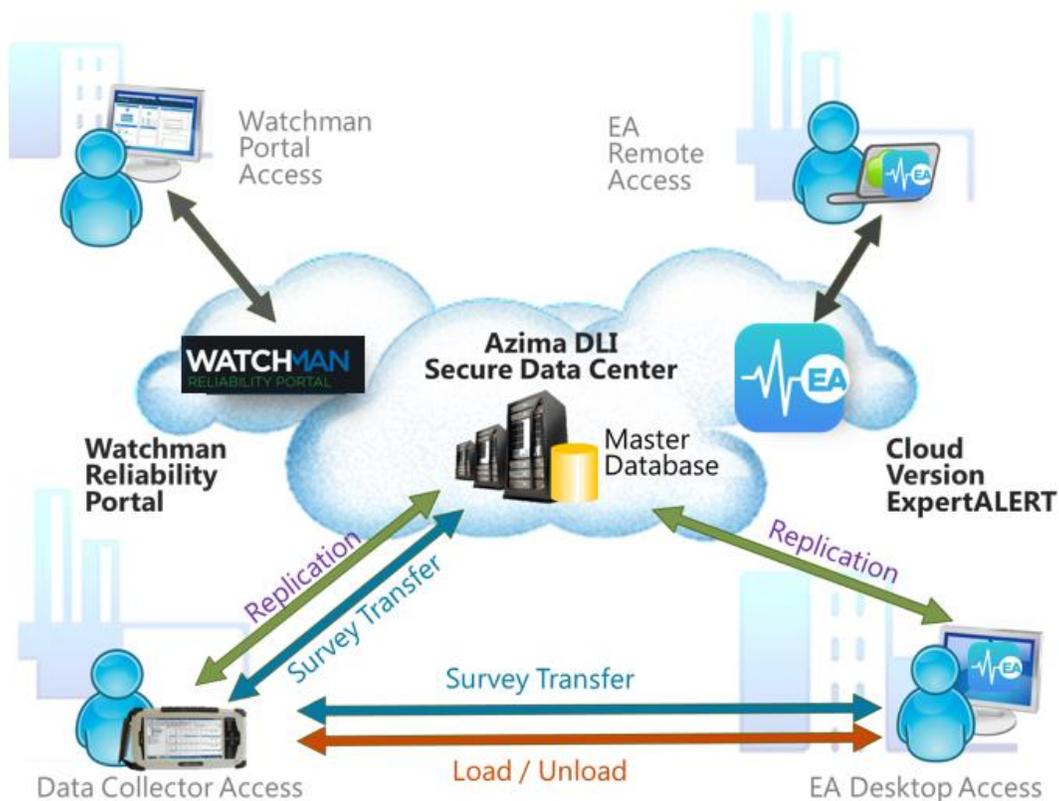


Managing Your ALERT Database

There are many ways to build your ALERT program. Before you begin, it is important to understand how you want your program to be laid out. Who will need access to the database to build machines? How will you communicate to the data collector in the field? Will machines be created or analyzed from the data collector in the plant or from a desktop workstation? Where will the database be hosted and who will manage this? Where will the analysts be located and how will they access? Who needs to receive reports or metrics and how will they be delivered. Azima programs can support a wide variety of solutions to these common questions. Getting these answers is paramount before installing your database and software.



One of the most common solutions to an Azima program is the cloud-hosted WATCHMAN Data Center. A centralized database, managed by the Azima IT and Portal Operations staff, provides the most value and widest flexibility for answering the questions above. A hosted system does not preclude end-users from performing their own data collection and analysis but rather facilitates a communication mechanism to securely backup and store the ALERT database, synchronized to each data collector and analyst, and offers a delivery of reports and metrics to all decision makers through a web portal.

The ALERT Database



The ALERT Database contains the following information:

- **User Information**
- **Collector Setups**
- **Plant Machinery**
- **Test Locations**
- **Current & Historical Data**
- **Diagnostic Reports**

An empty (default) database is installed with your ALERT software or provided by Azima DLI if using the WATCHMAN Data Center. All ALERT programs must start from an Azima provided database. This is a complex database. To help new users get familiar with their program, a demo database is available from the Azima DLI Resource Center, <http://knowledge.AzimaDLI.com>.

The database is a single file with accompanying log file. Users who are installing this database on their own computers and networks must develop a database management program to identify where the database will be located, the naming convention for the folder structure, and a mechanism for backup and recovery if something should go awry.

Locally installed programs, either on local PC or local server, should use a folder naming convention to label the version and application for the database. Each organization should develop a backup routine for recovery if ever needed.

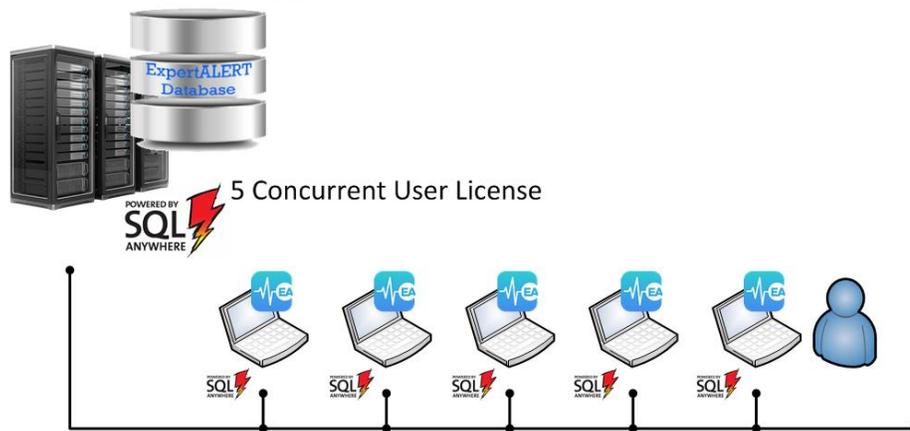
The Local Setup

Local Standalone Installation



The advantage of a local installation is the simplicity of the setup. A local system contains the ALERT software, the ALERT database, and the Sybase engine. However, this setup also has the highest risk given backups are generally manual and often forgotten. Also, unless working only directly from the TRIO Data Collector, this setup is the most complicated for communication between two or more users.

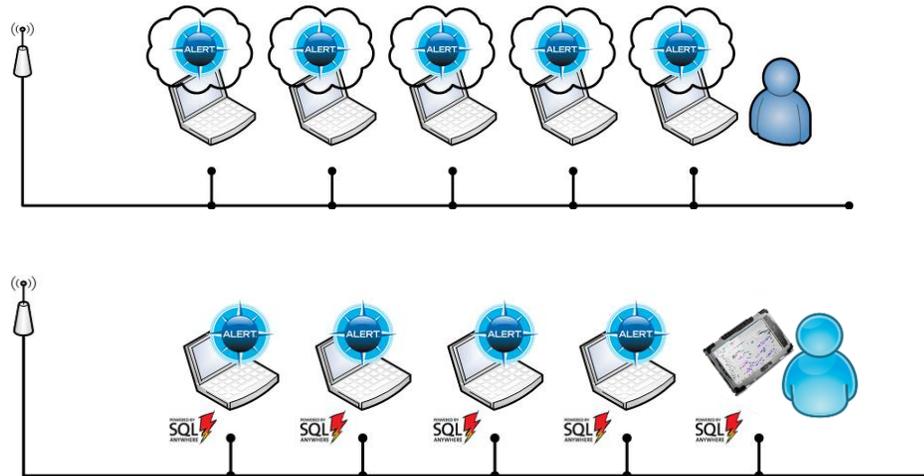
Local Server Installation



Server installation has significantly less risk than the standalone installation given that most IT departments have backup routines to manage the server's contents. When connecting a database through a server, multiple analysts are capable of accessing the same database to work concurrently. This requires a concurrent license of Sybase. Considerations will still need to be made about how to communicate with the TRIO Data Collector(s) and the cost to maintain the network infrastructure.

The Hosted Setup

WATCHMAN Data Center



The WATCHMAN Data Center offers users significant advantages and allows customers to adapt to the connected world of Industrial Internet of Things (IIoT) and program visibility.

The hosted model merely puts a “Master” ALERT Database in Azima’s safe and secure cloud. Azima will provide local IT staff with the necessary IT setups to transmit data to this database. Analysts can work directly from the WATCHMAN Data Center in a cloud-version of the ExpertALERT software and TRIO Data Collectors are configured to synchronize data through a simple user interface.

The advantage of this system is the lessened risk to your database given the IT hosting is directly managed by Azima. Multiple analysts can work concurrently, software licenses are easy to manage as no software needs to be installed on a local PC, there are no capital expenditures for your program, and most importantly, managers and executives can gain visibility through business level metrics and reporting through the secure WATCHMAN Reliability Portal.

Sybase SQL Anywhere 12.0

In all of the illustrations above, with the exception of the ExpertALERT-Cloud Subscription, an instance of Sybase SQL Anywhere is needed to manage the database. This engine connects the ALERT or TRIO software applications to the complex ALERT database.

In all cases, users of the ALERT or TRIO software should have familiarity with how to “register” a database with the Sybase engine. When installing the ALERT software for the first time, the install will register an empty, default version of the ALERT database labeled “EADB”. However, users should create a naming convention and backup mechanism to manage their databases for the long term use with a program.

The folder which contains the ALERT database is typically in a subfolder off of the C: drive labeled “EA40DATA” (or similar). In this folder you would find the default database. It is highly suggested that all subsequent databases used by your program are contained within this “EA40DATA” folder. This will make for easy identification later down the road.

Within the EA40DATA folder, subfolders should be created to manage your own unique database(s) for your plant(s). It is suggested that the name of these subfolders match the name of your plant or facility to make for easy identification. The actual database name is not easily changed and will likely remain “EADB.DB” and “EADB.LOG”. Consider these two files to be locked together. And do not combine more than one set of files in the same folder.

Backup Routines

To backup your local installation of a database, it is easiest to merely copy the entire folder which contains your DB and LOG files. A copy can easily be made to a safe location and the folder can be easily renamed to include indication of backup copy and date.

Given there is no undo in a database, it is highly advised to perform routine backups on your database or master database if setting up a replicating network. Locally served databases will need IT support to stop the Sybase service so the backup can be accomplished.



Registering Your Database with ODBC Administrator

When you open ALERT or Collector, you will see a sign-in window to enter your username, password, and select from a Data Source. The Data Sources are defined in the ODBC Data Source Administrator. This tool is where you “register your database” with the Sybase SQL Anywhere 12.0 engine.

The process is three steps:

1. Open “ODBC Data Source Administrator”

It is easiest to search in your START menu for “ODBC” to location. Once you open, you will see options to add, remove, or configure (edit) a data source.

There are two tabs that can be used for your ALERT database, either the USER DSN or the SYSTEM DSN. Azima recommends users use the **SYSTEM DSN** option for your program.

Select SYSTEM DSN and then click “Add...” to setup a new database.

When you ADD a new database, select “**SQL Anywhere 12**” as the driver.

2. Give your database a Data Source Name

The name entered in the “Data Source Name:” field is the name that will appear in the pull-down list when you launch ALERT or Collector. This name should be descriptive enough so users would know the source. The plant name is common.

3. Locate the Database on your Computer

Either a data source can be running, like if on a server, or they can be started, like if on a PC or TRIO. If setting up a server system, refer to the installation manual. For a local PC or TRIO setup, select the option “**Start and connect to a database on this computer**” from the Action options. And then **Browse** to locate the database on your hard drive. Select Ok and then Finish to complete your setup.

