



# What is ObSys?

ObSys is a software package that allows a Windows PC to be used for integrating, controlling, and managing different systems within a building.

ObSys allows the engineer to choose from a wide range of PC hardware: embedded PCs become integration controllers, desktop PCs become displays for engineers, and rack-mount servers become massive data loggers.



The heart of ObSys is the ObServer application – low-level software that integrates third-party equipment and IT networks to form a single coherent system.

ObSys also includes applications that add more power to ObServer: ObView is a multi-purpose, multi-screen graphical user interface; Alarm Manager receives and displays critical event messages; and Data Manager periodically records data for display and analysis.

## Essential Integration

When ObServer is running, the PC becomes the most powerful member of North's family of building controllers, which also includes Integrator and Commander.

ObServer contains North's interface technology, allowing ObServer to access values within thousands of different third party systems. ObServer also contains ObVerse, North's graphical cause-and-effect language, for optimising plant operation.

Web serving is also built into ObServer – providing HTML web pages viewable using all modern browsers – and engineers can add their own dynamic graphics if necessary.

## Management Enhancements

To complement ObServer, ObSys contains other applications for managing one or more buildings even more efficiently from a single Windows PC, with perhaps multiple screens.

ObView allows the engineer to generate monitoring pages on-the-fly, to allow areas of operation to be monitored more effectively. Several pages can be displayed simultaneously, limited only by the screen size – they can even work on PCs with multiple screens.

Alarm Manager collects and displays alarm messages from the systems. The user can view new alarms as they occur and Alarm Manager records when each has been dealt with. Individual alarms can be linked to documents, which the user can view directly from the alarm window.

Data Manager is a powerful data-logger and viewer. Values are recorded into standard CSV files, and statistical-analysis can be performed to determine whether the value is outside of acceptable limits.

# Essential Integration

When ObServer is running, the PC becomes the most powerful member of North's family of building controllers, which also includes Integrator and Commander.

## Interfacing

ObServer contains North's interface technology. ObServer can access values within thousands of different third party systems using North's library of drivers. These drivers also allow ObServer to pass data between systems – HVAC systems can interact with chillers – security systems can interoperate with lighting systems – CCTV systems can link with fire alarm systems – and make these values available to BACnet and Modbus. This technology enables the engineer to link different sub-systems within a building, and form a single coherent system.

ObServer also allows third-party applications to connect and share data. ObServer's ActiveX control can be incorporated to speed development. The third-party application can both request data from ObServer and serve data to ObServer – the developer decides.

## Controlling

ObVerse is North's graphical cause-and-effect language. It is available in all North controllers. It is easy to use, provides real flexibility during engineering, and allows access to values within any connected third-party system. Date and timer functions are included, along with feedback control and logic.

## Informing

ObServer generates and serves HTML web pages automatically - these provide a consistent user display on all browsers, including those on mobile devices. If necessary, the style of the web pages can be changed to match the customer's house-style, and additional dynamic graphics can be created.

ObServer can send alarm notifications to your email server, and can even filter alarms and send important alarms as SMS messages to mobile phones.

ObServer can also communicate with the other applications of ObSys – ObView, Alarm Manager and Data Manager.



# Management Enhancements

Although web server pages are available to view on any browser on any PC, certain users require the benefits of higher-powered tools and single-seat displays – ObSys includes other applications to satisfy these needs.

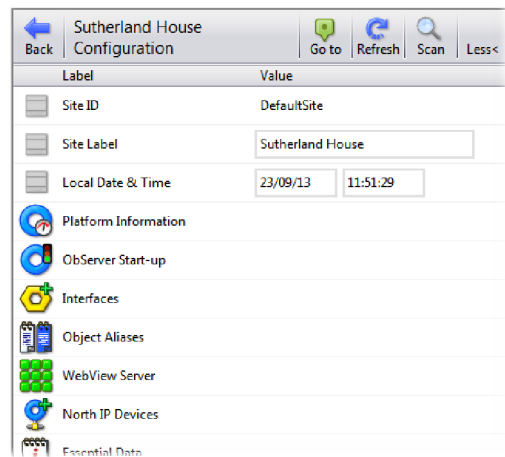
## ObView

Using ObView, the engineer can produce displays of true power – simultaneously displaying multiple views, each performing a particular task, working across multiple screens if necessary.

ObView also performs when speed is essential. It not only displays pages quickly, but also updates individual values on any page at the correct rate – ObView draws static items only once, whilst the redrawing of important plant states happens every few seconds.

If important events occur, ObView can ensure the user sees the page with that information – forcing the page to the front of the Windows desktop, or even starting the page if necessary. ObView can also interact with other applications on the PC – word-processors, databases, and spreadsheets can all interoperate.

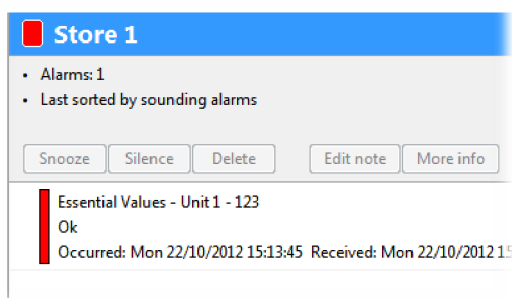
ObView supports an extended version of North’s cause-and-effect language, giving engineers the ability to create their own library of reusable display items.



## Alarm Manager

Alarm management can be the most important part of a system. When alarms arrive, they must be dealt with quickly and efficiently, with records kept of those who performed any associated tasks, and how long they took. Alarm Manager provides this level of service.

Alarm Manager sorts and filters alarms, producing different warning sounds depending upon the alarm priority.



The engineer can associate a document to each type of alarm, giving extra procedure details, external contacts, or even location data, to help the user deal with the alarm.

The user can silence the alarm at any time, and after checking or correcting a fault, can mark the alarm as finished – Alarm Manager records the time of both these actions.

Several different PCs running Alarm Manager can share an alarm database, and when a user silences an alarm on one PC, the displays of the other PCs automatically change to show what is happening.

## Data Manager

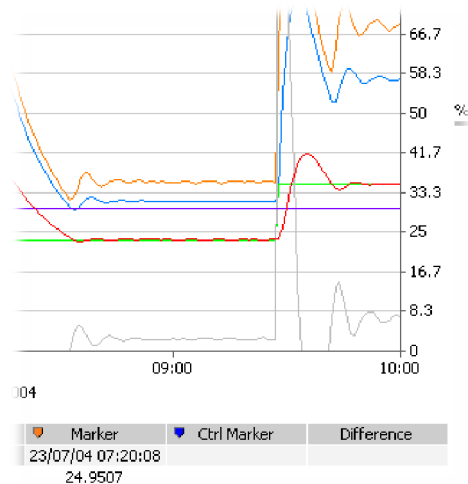
Collecting and viewing historical logs of a particular value can help understand that value and how it changes, and can help with fault diagnosis. Data Manager is the tool to use for data logging and viewing.

Data Manager periodically records a value from anywhere on the system to produce a log of that value over time. Data Manager can log thousands of such values over the years – the PC's disk size is the only limit.

The user views the logs on-screen – and because the data is recorded on the local PC, scrolling is fast and smooth even when looking far back in time. The data is stored in CSV format, so databases and spreadsheets can import the information as necessary.

Logs can be analysed statistically – with Data Manager learning how the value changes over the week. After several weeks of learning, Data Manager shows the learned limits of the value, and can even send alarm messages if the value goes outside of learned levels. It can also compare the value against manual limits, and generate alarm messages if necessary.

Data Manager can periodically collect logs from other devices, such as Commander, Integrator and other PCs, to save on communications over longer distances.



## Next Steps...

A time-limited version of ObSys is available from [www.northbt.com](http://www.northbt.com), along with an *ObSys Tutorial*.

The tutorial examples are built around the cost-effective Zip Training Pack, which can also be used for demonstrations.

Hands-on training courses run regularly, covering Commander, ObSys and Zip.



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