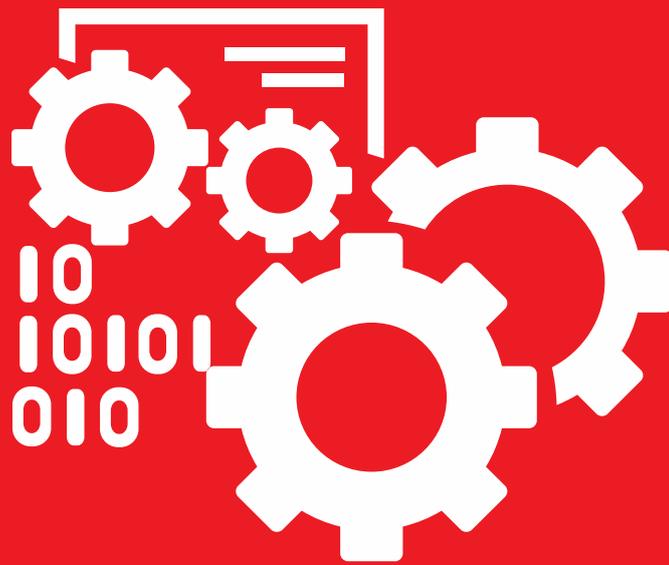


# WHITE PAPER



TAKE CONTROL OF YOUR  
IT ENVIRONMENT

**iCORE**

Turning data into profit



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## Summary

Keeping your IT maintenance manageable and cost-effective requires:

- **Good information logistics**, which means that information is always up-to-date and available when and where it is needed.
- **Systems that can easily be updated and adapted to new business requirements** – without interrupting the business processes running in the production environment.
- **An IT architecture with built-in traceability, alarm functionality, redundancy and tools that let you correct errors without losing any information.** With the right tools you are in control – without them, a simple error can cause a snowballing effect that will cost a lot of time and money to correct.

**iCore Integration Suite** provides the tools required to take control of your information flows. The built-in tracking and alarm functionality in iCIS alerts you when something goes wrong and directs you to the source of the problem. Once the error has been corrected you can continue the process flow where it was interrupted – there is no risk of missing information or getting the same information twice. With an iCore system setup, information is updated exactly where it is needed, which reduces the manual workload considerably. Furthermore, any iCore user at your company can access the business flow and make adjustments when necessary, there is no need call the IT department which saves both time and money. The built-in disaster recovery minimizes downtime.

With iCore add-ons and packages, you can perform regular health checks on your system. With a simple report function, the result can be sent in an e-mail to multiple recipients or presented on the company intranet. The CIO, IT managers, planners and strategists can all take part and discover inconsistencies before they develop into real problems.

iCore Integration Suite lets you configure tracking, alarm and control to fit your needs so you can take full control of your IT environment.

## Introduction

It would be great if an IT system, once implemented, worked perfectly forever and required no maintenance. However, we all know this is not how it works in real life.

To support complex, real-time information flows you need an architecture with built-in tools that assists you with automatic monitoring and alerts you when an error occurs. You want to reduce the time spent on maintenance and administration, while at the same time increasing your level of control. It may sound contradictory, but with the right tools and the right integration strategy it is not an unrealistic goal.

When something goes wrong, it is important to be able to quickly and accurately trace the source of the problem. Once the problem has been solved, you want to be able to continue the process flow exactly where it failed, without losing any important information. There should not be a risk of missing important data or receiving the same data twice.

A secure IT environment requires powerful features for tracking, traceability, alarms and redundancy – features that will let you **be in control**.

## Information logistics in IT

“Information logistics” describes the flow of information within an organisation or between multiple organisations, for example a corporation and its customers and partners.

The keywords in information logistics is *availability* and *quality of information*. Good information logistics means providing the intended recipient with the correct information, at the right point in time, in the correct format/quality, at the right location.



Reaching these goals requires you to:

- Analyze the demand for information in the corporation.
- Optimize the flow of information.
- Secure technical and organizational flexibility.

Achieving good information logistics also requires a well-designed IT architecture that includes tools for monitoring, management and control. It should also be flexible and allow easy and secure updates.

Ideally, the monitoring and control functions should be built in from the start but still let you decide to what extent you want to implement them. A gradual implementation allows you to improve the control of one information flow at a time.

## Keep track of your processes - logging

Most IT systems today perform some form of logging, but the quality of the logging information differs a great deal. To keep track of the processes in your system and allow for efficient troubleshooting, the logging function should offer multiple levels of detail and it must be possible to use logging data to track the source of a problem down to the smallest element.



In iCore products, tracking functionality has always been fundamental.

The runtime in iCore Process Server (iCPS) creates four different types of “tracking entities”: **Jobs**, **Events**, **Nodes** and **Log entries**.

- A **Job** is the executing instance of a Component (a processing in the form of a Script, Adapterflow or Workflow). A Job can also create:
  - **Events** defined by the user, for example “Orders to ERP”. An Event can be used to create a new Job which in turn starts a new processing.
  - **Nodes**, or “snapshots” that display data and metadata at a certain point in the information flow. These snapshots allow you to restart a flow from the exact point where it failed, thus avoiding any risk of losing or duplicating information.
  - **Log entries** that contains general information or error information. The amount of log entries in the log depends on the selected log level. It is also possible to write manually to the log, for example through an activity in an Adapterflow.

## Find what you are looking for - traceability

Data traceability means that you can follow the data lifecycle in your systems and see exactly when information has been accessed or changed. Traceability increases transparency and enables better control – an environment that offers poor traceability will become very difficult to troubleshoot, and you will end up spending a lot of time trying to find the source of a problem or failed information flow.



Consequently, good traceability means less time spent on administration and maintenance, which frees up resources and lets your staff work on other tasks.

To be really effective, traceability features must be complemented with user-friendly tools for searching and locating data in the information flows. iCore products let you build powerful filters to view, select, sort and group entities of different types (for example Partners, Nodes or Events).

## Solve problems before they appear - health checks

Problems in an IT environment are often not discovered before something goes wrong. At that point, the error may already have caused a costly interruption in production.



One way to act proactively is to set up your systems to deliver “Is alive” messages on a regular basis, ensuring you that everything is working as it should. Another option is to perform regular health checks on your system. With a simple report function, the result can be delivered in an e-mail to interested parties or presented on the company intranet.

The health checks enable the CIO, IT managers, planners and strategists to be in control and work together to discover inconsistencies before they become real problems.

## Get the right type of warning, in time - alarms

When something does go wrong in your IT systems, you need an effective alarm function that sends out an alert and points to source of the problem. Maybe you want the alert in the shape of an e-mail or a text message to your cellphone, with the right tools, this is easily accomplished. Error handling in iCIS is like any other type of integration process – totally customizable.



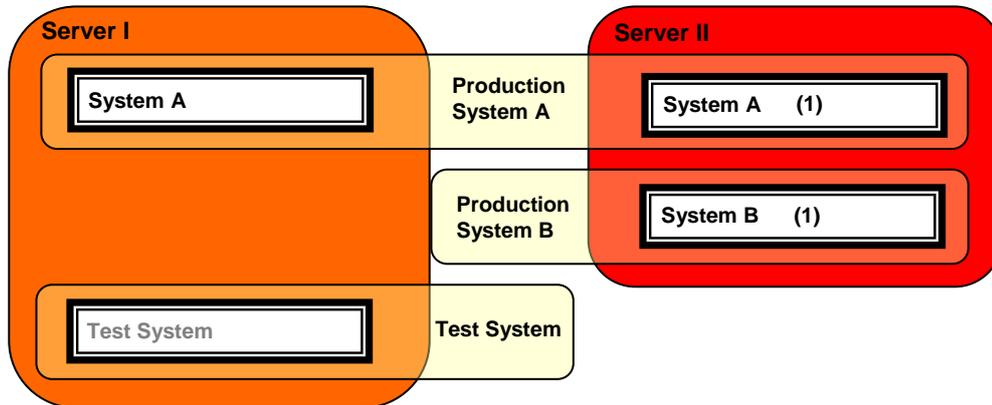
For example, an Adapterflow can be configured to create an error reporting Event if the Adapterflow fails to process. The error reporting Event contains references to the failed process which makes it possible to extract any relevant Job, Event, Node or Log entry. The Event can also be set up to start another Component as a response to the failed Adapterflow.

## Test facilities and redundancy

System environments need to be continuously developed and updated. However, implementing new functionality in a production system is always risky – you want to make sure the functionality is thoroughly evaluated in a test environment (that resembles the production environment as closely as possible) before introducing it in production.

With iCore, you can have more than one system installed on a single machine, which allows you to run a test system parallel to a production system. In the test system, you can try out complete information flows, with real data, before implementing them in the production system.

**Example: Test facilities and redundancy in iCore**



Furthermore, iCore users have access to a dedicated test application, the Run Component tool. This application enables you to test out single Components in an environment almost identical to the real one. In Run Component, the new Components are tested with settings and data fetched directly from the “live” system.

The iCore test facilities allow for a three-phase implementation procedure for updates before implementing updates or modifications in the production environment.

The iCore products are also built for redundancy. With just two servers, you can configure your systems so that if one server goes down, the other one will automatically take over.

## Why choose iCore?

So, what makes iCore products different from those of other vendors? Many of the functions described above are, after all, available in other products – in one form or another.



One of the great advantages of our software (the iCore Integration Suite) is that powerful functions for tracking, traceability, alarms, redundancy, and testing are built in from the start. It is all there, ready to be used instantly, and can be configured to suit your specific needs.

iCore Integration Suite lets you take control of all the data flowing between your IT systems, much like a logistics manager is in charge of supply chains. This is what we call information logistics.

### Simple solutions and work methods

We believe in clearly defined, simple, and practical solutions. This approach characterizes the design and development of our products as well as the way we manage and implement iCore projects.



Regardless if the integration solution has been designed and implemented by iCore, an iCore Certified Partner or by your own staff – any user trained in iCore products should be able to modify, update and develop the solution when your business requires it.

In today's fast-moving business climate, an iCore integration solution offers adaptability that gives you a competitive edge. We provide templates, configuration wizards, checklists, mentorship, training and state-of-the-art tools that enable development of user-friendly, highly modifiable solutions that will let you stay on the front line.

### Solutions that are easy to monitor and maintain

Since no IT environment is fool-proof, it is important to provide the administrator with powerful tools for monitoring, maintenance, and troubleshooting.



In addition to the various maintenance features already available in iCIS (tracking, traceability and alarms) we have also improved the popular entity filters that allow users to search, select, sort, and group entities in almost every possible way. For example, you can use mathematical operators to filter out the information you need in a large data set. The downloadable Daily Maintenance package contains tools for setting up a regular maintenance routine for tracking entities.

Furthermore, the detail views in iCore Administrator now show references and associations to other Events, parent and sibling Nodes and other relations.

### “Add-on” services

iCore also offers a number of “add-on” services, such as operations support and health check functions. The operations support function, with status messages (“Is alive”-messages), is used and appreciated by many customers. iCore Health Check is a configurable iCore function that allows you to fetch detailed information about the current status of your iCore system.



The function fetches four types of information:

- **Disk space**  
Available disk space on one or several disks.
- **CPU usage**  
Current CPU usage in percentage.
- **Processes**  
Memory usage of specified processes.
- **Custom counter**  
Information from the Performance Monitor in Windows. The data that can be fetched depends on the Windows version. Examples are system start time and current number of messages waiting on a specified queue.

All information is fetched to an XML file which is stored as a Node in the iCore system. We recommend you use the health check function together with the iCore Reporting module. This enables you to add a style sheet to get a user friendly version of the report and send it by e-mail or present it on your intranet.

**Take control and get a truly reliable IT environment!**