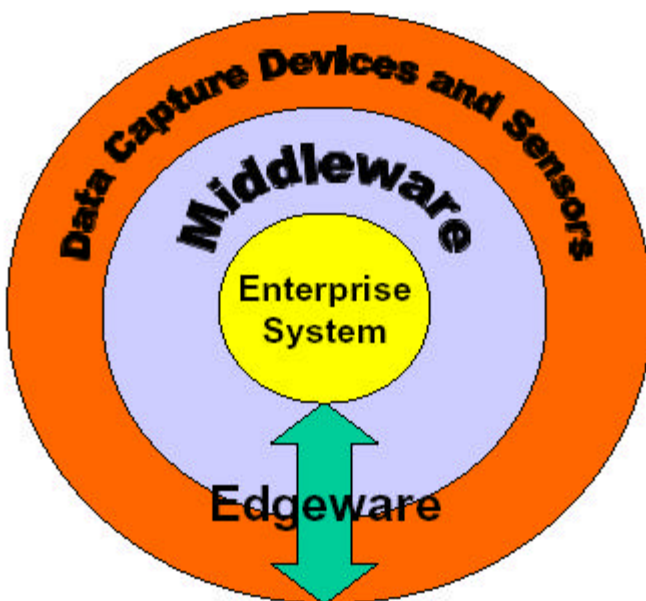


To: [[Contact:26]] from [[Company:25]]

In this issue:

- Introduction to “Edgeware”
- New Product Release – **UMD-Edge™** – Edge Device Management Platform
 - *This is a significant new product release from UMD*
- Cebit 2006 – UMD Stand G48 – “get the “edge” on Data Capture & RFID”

Introduction to Edgeware



Edgeware is a new IT term that, if you have not already, need to become familiar with.

Edgeware represents the hardware and software that extends the *Enterprise System* to the point of data capture.

The *Data Capture Devices and Sensors*, interface the *Enterprise System* to the real world and typically include RFID and Barcode readers, sensors (like temperature, proximity etc) and actuators (i.e. for control).

In many cases, the *Enterprise System* may not have the necessary capability to communicate or control the “Edgeware” devices. Additional *Middleware* software will generally be added to the *Enterprise System* to provide the necessary software interface to both the *Enterprise System* and *Data Capture Devices*.

The *Middleware* software may also provide additional business logic functions, which the *Enterprise System* may not be able to perform. A good example of this is in a RFID System. In a typical RFID warehousing environment, a fixed RFID reader may be placed over a door to read all pallets passing through it. RFID readers actually constantly poll the antenna, resulting in multiple readings of the same RFID tag. The *Middleware* software would “filter” this data to generate a list of single valid RFID tag numbers before it is presented to the *Enterprise System*.

Edgeware systems will play an important role in the future of ubiquitous systems, as Edgeware enable *Enterprise Systems* to sense and interact with the real world.

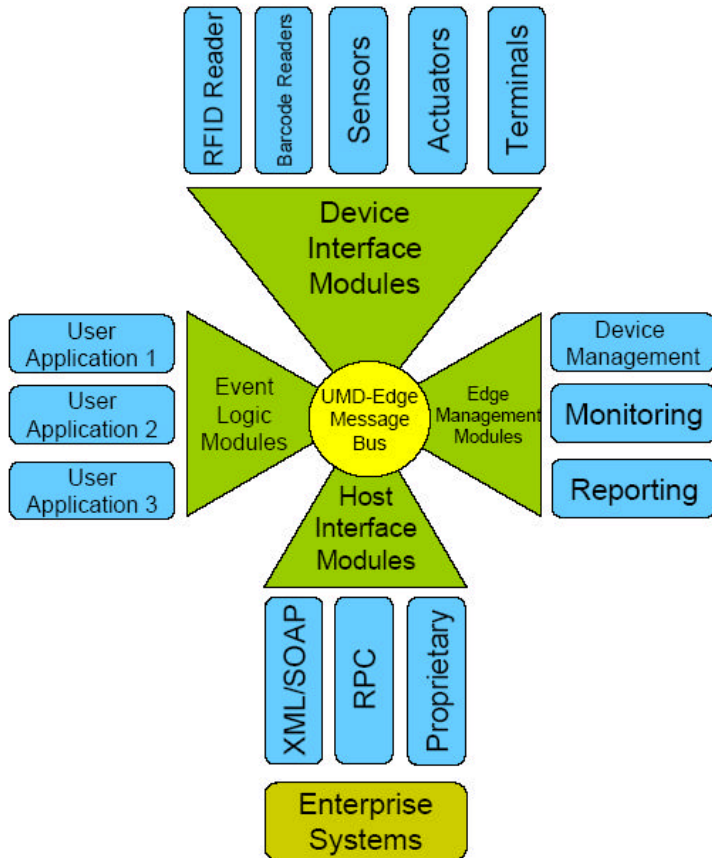
Especially with the introduction of RFID and Sensors, the challenge is going to be how to manage these Edgeware devices, collect and process data and collaborate with other systems, including the *Enterprise System*.

UMD has met this challenge, with the introduction of **UMD-Edge™** – *UMD’s Edge Device Management Platform*.

Product Release

UMD-Edge™: Edge Device Management Platform

UMD-Edge™ is an Information and Communications Technology (ICT) platform that enables Enterprise Systems to delegate responsibility for control, management and monitoring of *Edge Devices*, such as RFID and barcode readers, actuators, sensors and human interface terminals.



UMD-Edge™ is based on next generation message management software, which moves data capture functionality from Enterprise Systems to locally based network devices.

The **UMD-Edge™** modular construction makes it ideal for many data capture applications, such as:

- Access Entry
- Asset tracking
- Environmental sensing
- Man – machine interfaces
- Stock control
- Warehousing

Advantages:

- Separates edge device infrastructure from centralised Enterprise Systems
- Unifies the interface between the Edge Devices and Enterprise Systems
- Operates *independently* of host applications
- *Flexible* – customised to meet each implementation’s unique requirements
- *Scalable* – scales out (multiple servers) and/or scale up (larger server).
- *Reporting*
- *Real-time monitoring* of traffic
- Links to a variety of *databases*
- *Troubleshooting tools*

UMD-Edge™ Technology:

The **UMD-Edge™** environment is provisioned as software running on one or more dedicated computer servers. There are two key elements to the software:

- 1) **UMD-Edge™ Message Bus** – This message bus allows *Software Interface Modules* to seamlessly interchange data and procedures. It is the core of the system that provides modularity and system flexibility.
- 2) **Software Interface Modules** – This is the software that uses the **UMD-Edge™ Bus** for communications. There are four types of module:
 - **Device Management Modules** – These modules are specific to each type of Edge Device. For each attached device, there is an instance of a Device Interface Module, which holds device configuration data.
 - **Event Logic Modules** – These modules implement custom logic that operates on **UMD-Edge™ Bus** traffic.
 - **Host Interface Modules** – These modules are used to transfer data between **UMD-Edge™** and Enterprise Systems such as ERP systems. They typically use XML, RPC or SOAP technologies, but are not restricted to these protocols.

- **Edge Management Modules** – These modules provide a human interface to the **UMD-Edge™** system via a web browser for device management and status monitoring.

Software Interface Modules are provided off the shelf from our growing library, or custom written to suit the application.

Example:

RFID installations can generate thousands of messages per minute and data needs to be filtered before it reaches the Enterprise System. **UMD-Edge™** Server solves this problem by separating the Edge Device infrastructure and data capture from the Enterprise System by:

- managing the many different Edge Devices: RFID & Barcode Readers and Sensors
- defining and controlling logic events: Enable RFID Readers when pallet is present
- pre-processing data: RFID tag filtering
- updating databases and logs: Update Product and Transactional logs
- generate alerts upon user defined triggers: advise me when pallet x arrives
- transferring data to host system: in a format it expects

Why UMD and UMD-Edge™

Since 1983 UMD has been using its **engineering ICT solutions** skills to design, select and integrate technology to solving customer’s needs for **data capture** and **interface solutions** using fixed and mobile **terminal devices** for a wide range of applications within the supply chain.

We understand how to design embedded systems, manage complex device protocols and interface to Edgeware devices.

Unique Micro Design can provide complete customised **UMD-Edge™** installations through our *engineering ICT solutions* offering. Get the “edge”, contact us at edge@umd.com.au or 03 9582 7000 to discuss your needs.

Cebit 2006

UMD will be exhibiting at **Cebit 2006**, we will be at **stand G48** (as part of the Data Capture section)

Cebit 2006 is at the Sydney Exhibition Centre, Darling Harbour, Sydney from Tuesday 9 May to Thursday 11 May from 10am to 6pm. Details can be found at www.cebt.com.au

Look forward to seeing you there.

Regards

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US Issue 08
