GEOWARE® 4
WASTE MANAGEMENT INFORMATION SYSTEMS

GEOWARE 4.1 SUCCESSFULLY DEPLOYED IN EDMONTON AND SNOHOMISH COUNTY

The new touchscreen interface of GEOWARE 4.1 includes a scale, function buttons, a data entry area, tabs that show details for the current activity, a graphic that represents the current traffic control state, and a scroll panel that lists activity history.

With over 20 years of experience with the Waste Management Industry, staff at Geoware Inc. have a good understanding of our clients' needs. Thus, our latest release, GEOWARE 4.1, was designed with flexibility in mind to better meet the needs of all of our clients. After three years of hard work, GEOWARE 4.1 is running successfully in both the city of Edmonton and Snohomish County.

The most visible difference with version 4.1 of GEOWARE is the graphical interface. Although operators can still use the same navigational keys as in previous versions of GEOWARE, users now have the option to use a mouse or even touchscreens.

Similar to GEOWARE 3, the Function Buttons change as you advance through the stages of a transaction. Look-up features are much more extensive, so now you can easily search for items such as load numbers. The Activity Detail section of the interface includes a number of tabs; with one mouse click or touch of the screen, you can navigate through these tabs to view information about the vehicle, load, customer, payment, and more. The Traffic Control graphic is a real time display of the condition of the gates and signals. Finally, the Scrolling Activity History panel is very helpful when searching for information about previous transactions.

A NOTE FROM THE EDITOR

Welcome to Geoware Inc.'s new newsletter! We have decided to start publishing this quarterly newsletter to keep our customers better informed about GEOWARE 4.

In this issue, you will find information regarding the deployment of GEOWARE 4.1 in Edmonton and Snohomish County. We've also included an article that clarifies the architecture and different versions of GEOWARE. An overview of our Remote Selection Methodology is presented on the back page.

Finally, at the end of the newsletter there's a staff photo. So, now you'll be able to put a face to the names of people that you deal with at Geoware, as well as find out about some employees that you didn't know existed!

This newsletter is intended to increase communication between Geoware and our clients. Thus, it is important to us that we know what you want. We've included a feedback form which we request you to fill out. Please take a moment to complete the form and return it to us. If you have any additional feedback or comments, please do not hesitate to email me. Thank you!

Sincerely,
Michelle Benes
Application Specialist
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Tony Susanna (VP of Technical Services) in the training room at Snohomish County.

GEOWARE 4.1 DEPLOYMENT

An important difference with GEOWARE 4.1 is that it allows an operator to start processing the next vehicle while the current vehicle is still on the scale. When used in combination with hot keys, this is incredibly powerful for reducing processing cycle times.

In addition to what you can see and do, the "insides" of the software have changed dramatically. Most notably, GEOWARE 4.1 has a modular design, allowing facilities to easily turn certain types of functionality on or off. If a facility does not require the features of a certain module, it can be turned off to make GEOWARE simpler and less overwhelming for operators.

To support the new modular design of GEOWARE 4.1, we have upgraded to an Oracle database. The new database is much faster, more stable and offers additional flexibility.

For instance, GEOWARE 4.1 enables operators to process multiple payments against the same load. Our software developers are also working on a feature that allows more than one material in a single load.

Another advantage to GEOWARE 4.1 is that it runs on Windows and Linux operating systems instead of requiring QNX. Therefore, a computer that runs GEOWARE may also be used as a desktop with access to other programs and the Internet. Furthermore, IT departments are more likely to be able to troubleshoot problems that occur in operating systems they are familiar with.

If you are interested in finding out more about GEOWARE 4.1, or would like to arrange a demo, please call our sales department at 1-800-900-4252 or email sales@Geoware4.com.

UNDERSTANDING GEOWARE ARCHITECTURE

Versions

During the recent User's Meetings, a bit of confusion was noticed regarding the various parts of a Geoware installation and the relationship between the modules. The following is an attempt to clarify this.

A few years ago, all Geoware customers were running version 3.3 of both the Administration Server and the Vehicle Processing Module. In an attempt to provide more flexible reporting capabilities along with other less obvious enhancements such as reliability and maintainability, Geoware introduced version 4.0 for the Administration server. Part of this upgrade was the transition from an *OnCmd* database to the *Oracle* database. The new version of the Administration Server required a corresponding upgrade to the Vehicle Processing application. The good news was that the new Vehicle Processing application, version 3.4, looked and behaved in exactly the same way as the previous version. The changes were in how and what was sent to the Administration Server. Currently most Geoware clients use version 4.0 of the Administration Server and version 3.4 of the Vehicle Processing module.

In 2004 a new release of the Vehicle Processing Module was introduced. The module was renamed to the *Scalehouse Module Version 4.1* to better reflect the new functionality that was added. Likewise, the Administration Server was renamed to *Scalehouse Services (Administration) Module,* and Cash Management was renamed to *Currency Processing.*

Module Names

The two main modules in the 3.X product are the *Administration Server* and the *Vehicle Processing Module.* These equate to *Scalehouse Services* and *Scalehouse Module* in 4.X.

The *Administration Server* collects the transaction data from all of the Vehicle Processing Modules at your site(s) (e.g. transfer stations, recycling centres, landfills). As you probably know, the Administration Server aggregates the data allowing you to invoice customers and run reports.

The *Vehicle Processing Module* interfaces with the scale, allowing the operator to input vehicle IDs, material types, etc. This data, along with other information (such as time and date), represent a transaction. Part of the transaction information can be printed to a driver's ticket; all the information is stored on the "primary node" (in a multiple workstation environment, one of the workstations typically does double duty as the site server or *primary node*). It is to this machine that the Administration Server connects to download all the transaction data. The connection and download process is called a "*polling cycle*".

There is a *Traffic Control Module* which interfaces with things such as barrier arm gates, loop detectors and traffic lights to allow GEOWARE to control the operation of those devices. Using Traffic Control to dictate when a vehicle may enter or leave the scale will run the site at optimum speed. This becomes important where transaction volumes are high.

The *AVID (Automated Processing in 4.X) Module* works in conjunction with the Vehicle Processing Module and the Traffic Control Module. Using some form of unattended vehicle identification such as swipe cards, PIN number entry pads or RFID, Automated Processing can process a vehicle into and out of the site without operator intervention.

Cash Management (Currency Processing in 4.X) is another module that works in conjunction with Vehicle Processing to allow cash payments to be accepted, processed and reconciled.

I hope you now have a better understanding of the Geoware product and its various modules.

After the wonderful reception we got at our first User's Meeting, we've decided to host

The Second Ontario GEOWARE USER'S MEETING November 17, 2005, 8:30 AM

The meeting will provide vital information for users as well as an opportunity to provide feedback to Geoware. Included will be a presentation on the status of our on-going product development efforts and a demonstration of the powerful new GEOWARE 4.1. Scalehouse module. There is limited seating available so if you plan to attend, we need to hear from you as soon as possible!

For more information, please send an email to sales@geoware4.com

REMOTE CONNECTIVITY SELECTION METHODOLOGY FOR GEOWARE SUPPORT AND MAINTENANCE

GEOWARE is typically deployed within a complex network infrastructure, and provides near real time data flow within an organization. Providing remote system support for Geoware within this environment requires a connectivity solution that addresses:

- business needs of waste management staff
- security concerns and technical resources of the information technology group
- Interoperability issues related to Geoware Inc. remote connectivity technologies

We have created a methodology for identifying an appropriate remote connectivity solution for the support of the Geoware system. Remote connectivity should be available to each facility for a minimum of its operating hours. Geoware Inc. support staff may require one or more of the following remote access mechanisms:

- Remote Screen Viewing
- Upload Data To Geoware Inc.
- Download Data From Geoware Inc.
- Operating System Command Line Access

The following table identifies commonly used remote connection technologies and the remote connection mechanisms that they support.

	Screen Viewing	Data Upload	Data Download	Command Line
PPP Dialup/ Modem	X	X	X	X
SSH	X	X	X	X
CITRIX	X			X
IPSec VPN	X			X

This is only a short excerpt of our remote connectivity selection methodology. To view the full document, please contact us at sales@geoware4.com