///Mandalay™

Beyond the Weighbridge

Facility Product Suite

Next level facility software – for smarter facilities

Facility Product Suite

Facility Product Suite

Next level facility software for waste, quarry and other facility applications.

Mandalay's Facility Product Suite offers a range of products available for use within the waste, resource recovery and quarry industries.

From capturing and processing vehicle movements in and out of sites, to delivering critical functions including transaction capture, Point-of-Sale (POS) payment processing and an interface with facility hardware.

- ✓ Landfills
- ✓ Transfer Stations
- ✓ Material Recovery Facilities (MRF)
- ✓ Tip Shops / Buy Back Shops / Recycle Markets
- ✓ Recycling Facilities
- ✓ Quarries

Developed over the past 20 years with the collective intelligence of over 400 waste processing and quarry facilities, Mandalay's Facility Product Suite can be configured to suit all facility situations. The software products can operate with or without a weighbridge and can also be configured for automation at unmanned facilities.

Including several extension products and services, the Facility Product Suite will not only drive the efficient running of your facility, but will also offer detailed reporting, dashboarding and management capabilities.

Contents

Above and beyond simple weighbridge software

Capture data at manned and un-manned facilities, record data according to various state-based and national regulatory requirements while providing admin and management teams with the ability to access and manage data across multiple facilities and locations.

Working in conjunction with Mandalay's range of extension products your data can be transformed into powerful information.

✓ Provide operators, who are working in sometimes difficult and remote locations, **an interface to capture and process transactions**.

✓ Ensure **unmanned sites consistently and accurately capture data**.

✓ Record data to **meet state and national regulatory requirements**.

✓ **Store data in the cloud**, removing the requirement for local server infrastructure and the reliance on specialised in-house resources to support it.

✓ Give management teams access to data and the ability to **manage information and users across multiple facilities** and locations.

What sets Mandalay apart?

Mandalay started business as a weighbridge software company and is now the leading provider of software and data management systems for the resource recovery industry in Australia.

Investment in technology development

Mandalay's Australian based development team continues to invest in our technology.

Leadership within the industry

With over 20 years' experience within the waste industry, Mandalay has built a thorough understanding of industry best practice.

A local team means local knowledge

Working with more than 450 operational sites across Australia and New Zealand means that we have local knowledge and understanding of the industry.

Product roadmap

Continually identifying what is relevant to the Australian market and driving product development beyond the weighbridge.

Usability

Offering the ability to integrate with existing systems.

What sets the Facility Product Suite apart?

Always up-to-date software

Mandalay offers a cloud-based software solution combined with the offline capabilities of deployed software. Data is secure and backed-up, software versions are deployed more often and with ease, and data is synchronised between remote facilities and central admin.

Regulatory compliance

A system that complies with various EPA and regulatory requirements such as state-based regulatory reporting and HVNL. As requirements change, the system is updated to suit.

Accurate reporting

Providing admin and management teams with near real-time data that can be used to manage your business. Let us help you with data setup to ensure you get the most from the system.

Integration with finance systems

Integration with finance systems will assist with payment processing and account management. Data can be exported in a format specific to your requirements.

A local support team

Mandalay's local and dedicated support team is available for assistance and troubleshooting. With significant industry experience, the Mandalay Consulting Team can provide guidance through more complex issues.

Facility types

Where can the Facility Product Suite be used?

Mandalay's Facility Product Suite is available for use within many different facility types. The Core Facility Product will use a weighbridge or other method to capture and measure volumes moving in and out of a facility, along with handling transactions and reporting.

With the capability of operating at either manned or unmanned facilities, the Facility Core Product can be configured to suit the requirements of your facility and situation.

Facility types

Landfill: A site used for the disposal of waste materials.

Transfer Stations: A facility where waste is temporarily deposited prior to transport to another facility, such as landfill or recycling facilities.

Material Recovery Facilities (MRF): Facilities that receive, separate, and prepare recyclable waste into separate streams for transport to manufacturers.

Recycling Facilities: Facilities, such as Resource Recovery Centres (RRC), receive, store and process sorted waste to create a saleable product.

Tip shops / Buy Back Shops / Recycle Markets: Facilities designed to re-sell items once destined for landfill.

Quarries: Facilities producing materials most commonly used in processing plants and construction.

By combining the functionality of a Driver Control Station (DCS) with Mandalay's Extension Products, such as Image Capture and License Plate Recognition, Mandalay can offer a fully automated experience.

Software Functionality

What are the Core Features within the Facility Product Suite?

Mandalay offers a **Facility Transactional System** along with **Facility Management**, **Support Services** and **Data** as standard inclusions within the Facility Core Product, plus, several extension products all available via a subscription licensing model.

- ✓ A Facility Transactional System that will issue, track and manage tickets, and process payments.
- ✓ Client profile and tracking, including vehicle access management.
- ✓ Built-in product coding and tracking tailored to waste industry needs and regulations.
- ✓ Personalised customer service training and ongoing support delivered by an Australian based support team.
- ✓ Integration with your facility infrastructure.
- ✓ Integration with finance systems to assist with payment processing and account management.
- ✓ Enhanced privacy and security.
- ✓ A hybrid cloud solution delivering both locally deployed and cloud-hosted components ensuring the system can operate offline (for up to 60 days).
- ✓ Access to an Australian based support team.

FACT SHEET – Facility Product Suite

Facility Transaction System

Ticketing

The ticketing function within the Facility Core Product is the operator-facing interface that facilitates the capture and processing of transactions in and out of your facility. The system allows for multi-facility operations across various facility types.

Functionality within ticketing is highly variable and can be set up to suit your requirements via the Configuration and Administration functions within your system.

- Ticketing Display
- Transaction Scenarios
- Docket Printing
- Alerts
- Payments

- Till Shift Management
- Temporary Account Management
- Internal Work Orders
- Additional Features

Facility Management

Data Administration

The Data Administration function within the Facility Core Product includes a variety of administrative functions that can be used to Manage different data elements at various levels from site-specific to organisational.

- Users
- Categories
- Product Management
- Product Pricing
- Contacts
- Contracts
- Contract Pricing
- Cartage Pricing
- Clients & Carriers
- Vehicle Management
- Vehicle Configuration

- Weight Conversion
- Advanced Driver Management
- Regulatory Compliance & Submissions
- Client Pricing
- Seasons
- Site-Based Pricing
- Payment types
- Locations
- Alerts
- Events
- Data Synchronisation

Facility Core Services

Help Desk and the Customer Service Portal (CSP)

Customers have access to Mandalay's Brisbane based Support Team, offering assistance with product and system questions, and support.

- Requests are captured via Mandalay's online Zendesk ticketing portal – the Customer Service Portal (CSP).
- The CSP also includes a library of information, articles, how-to's, and product release information with articles continually being added and updated.

Access to Support

Standard support hours are 8:00 am to 5:00 pm AEST Monday to Friday. However, Mandalay's team is available for support 24 hours per day, 365 days per year with non-critical incidents charged at Mandalay's standard after-hours rates. Business hours support is a standard inclusion of the Facility Product Suite subscription.

Service Level Agreement

Service level performance across all services provided by Mandalay has been outlined within Mandalay's Service Level Agreement (SLA). Planned service upgrades are notified in advance and take place outside of normal business hours.

60min Response Time

During standard business hours, all service requests received by the Mandalay support team will be responded to within 60 minutes. Incidents are classified according to Mandalay's Service Level Agreement (SLA) which outlines target resolution times.

Facility Data

Transaction Search

Transaction Search is an **easy-to-use ticketing search engine** accessed within the **naus Platform**. This application allows users to quickly find a specific transaction or a set of transactions that relate to a customer, keyword, vehicle, ticket number, or date range. Items can be filtered by site and presented in an easy-to-use table format that allows for quick processing of key information.

Customers who are also using the Image Capture product will access images captured with transactions through the Transaction Search application.
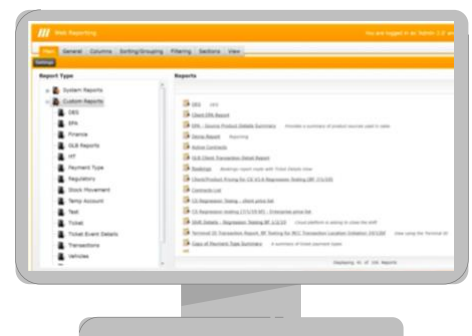
Reporting (Standard)

Reports are available via a centralised Web-Based Reporting tool (WBR) which allows PDF, Excel or raw data outputs.

A standard set of reports are included. There are many templates available which allow you to create and run detailed custom reports with ease or create your own customised report templates. Management reports and summaries, client reports, regulatory compliance reports and auditing reports are a few of the reports commonly used.

Reporting benefits are extensive:

- ✓ Any user can access the service anytime online.
- ✓ Minimal software is required (IE and Silverlight).
- ✓ Seeded reports are available.
- ✓ Custom reports can be created.

Accessed via Internet Explorer and connecting to your site database through the cloud via a secure login. Training will be included and delivered during project implementation

To further extend your reporting capabilities, Mandalay's Facility Analytics and Reporting product offers a combination of dashboards and detailed reporting capabilities to provide a more powerful and detailed view of your data.

Extension Products

Enhance your Facility Product Suite subscription through a combination of the following extension products to suit your facility and organisation. Each product is available via an additional subscription, once the Facility Core Product has been installed.

- ✓ Integrate with more of your existing hardware, solutions or processes.
- ✓ Capture even more detailed data for transformation into useable information.
- ✓ Increase your understanding of commercial and community habits.

Extension Transactional Products

EFTPOS

Designed to integrate the Facility Core Product with EFTPOS terminals via a third-party product called Linkly (PC-EFTPOS).

Image Capture

Automatically capture images from cameras installed at your facility. Images are recorded at the point a weight is stored or when a transaction is completed, allowing you to verify transactional data.

License Plate Recognition (LPR)

When used in the right situation, LPR can offer streamlined vehicle selection and allow some automation of basic ticketing and access control functions.

Site-Based Pricing

Typically, applicable to larger organisations managing multiple sites as separate business units. Site-Based Pricing will allow pricing to be set at the site level.

Multi Weigh

Allow multiple products in a single load to be added to a single transaction with a net weight recorded against each product.

UAT Environment

A UAT Environment (tenancy) allows the ability to conduct User Acceptance Testing before migrating data into the production tenancy. While included with new implementations, if customers wish to extend access to UAT Environments post go live, an additional subscription is required.

Extension Services

Training

Mandalay can provide additional training programs tailored to your individual needs. Training can be delivered on-site or remotely to suit your situation and requirements.

Consulting

A specialist offering in waste industry consulting, focused on operational efficiencies, technology and data.

Extension Data Products

Data & Finance Import/Export

Integration with finance systems will assist with payment processing and account management. Data can be exported in a format specific to your system requirements.

API Suite

The naus API Suite is made up of multiple API products where each is designed for a specific purpose and generally for a specific domain.

Facility Analytics & Reporting

A variety of analytics and reporting capabilities driving insights and actions and accessed via the naus Intelligence Platform. Offering a combination of dashboards and detailed reporting capabilities, Facility Analytics and Reporting offers a suite of tools giving your organisation the big picture view across your facility(s) down to the minute detail of individual transactions.

More information

Detailed Fact Sheets are available for each of these extension products. Request your copy today or visit www.mandalaytech.com.au/products/facility-product-suite.

Integration

Finance Systems

There are several options available for integrating with or generating custom exports for Financial Systems. These options are available via the **Data & Finance Import/Export** extension product.

The following considerations will determine the integration method that will be best suited.

- Capability of the finance system being integrated to.
- Level of integration required.
- Manual or automated control.
- Technology level and capability of your IT department.
- Type of transactions to be managed.

Whilst modern technologies for integration are available through Mandalay's API Suite, the most common method for integration is through flat file generation. Mandalay will work with your team to identify your exact requirements.

Hardware & Facility Infrastructure

The software may run on a variety of machine types depending on your application and environment, e.g. PCs, POS Terminals, tablets, or embedded PCs within Driver Control Stations (DCS) for automation.

The Facility Core Product software integrates with a variety of hardware devices found at facilities. These hardware devices may be part of existing infrastructure such as weighbridges, traffic lights, boom gates, CCTV cameras, etc. In these cases, sometimes additional hardware is required to convert or manage communication, such as serial to ethernet converters and relay cards. Additional hardware may also be included as part of the solution for example printers and barcode scanners.

It is often more cost-effective for organisations to procure their own hardware devices providing they meet minimum specifications. However, Mandalay can supply hardware if required, with items fit for purpose and selected based on their ability to integrate with the Facility Product Suite. Minimum and recommended specifications can be provided on request.

Cloud-Enabled Local Software

Hybrid Data Solution

Enabling the benefits of cloud data storage with the offline capabilities of deployed software.

Designed as a hybrid model specifically to operate in often remote environments, the Facility Product Suite offers the benefits of a cloud solution whilst removing the dependency on a stable network connection.

Deployed software runs on local networks with local data storage and local infrastructure but with the added benefit of having all data replicated to the cloud.

- ✓ All data is stored on local infrastructure at site, with transactions captured by the Facility Core Product being written into a database on the local PC.
- ✓ Transactions can run offline for up to 60 days. So, in the event that connection is lost ticketing will continue to operate and data will synchronise once the connection is re-established.
- ✓ A hardware layer will connect local hardware such as weighbridges, scales, traffic lights, and cameras over an IP network.
- ✓ On-site backup PCs can be deployed utilising two (or more) SQL instances with each instance synchronising via the cloud. The intent of this function is to provide on-site redundancy in the case of SQL instance failure, i.e. hardware hosting the Primary SQL instance, failure of the Primary SQL instance itself, or technical faults with the host computer.

Data Synchronisation

Ensuring data is synchronised and backed-up

Mandalay's proprietary data synchronisation tool, DataSync, provides a solution for synchronising on-premises and remote PCs (generally point-of-sale or driver control stations) with a cloud-based master database and applications.

Designed to provide more reliable data synchronisation, DataSync even works well in low bandwidth (including 3G mobile networks) and unstable WAN environments. Deployed PCs can run up to 60 days offline. When the PCs come back online during the 60-day period, data is automatically synchronised.

Data is reliably replicated bi-directionally and offers a detailed audit trail of all changes.

Product Security

The naus Intelligence Platform, ensuring a secure environment

All data that comes from site is stored in Microsoft Azure, in tier 4 cloud-based data centres located in Sydney, Australia with additional redundancy in Melbourne, Australia.

Mandalay's cloud databases run on top of Microsoft SQL Azure, a hosted offering that is both highly available and highly scalable. It includes 24x7 monitoring and implements many key security features such as transparent data encryption and threat detection to give customers peace of mind. In addition, continuous backups are taken every five minutes and are retained for 35 days ensuring disaster recovery is available if the need arises.

Flexible Access

How do you access the Facility Product Suite?

For Operators at the facility: The Facility Core Product is accessed via local PCs or POS terminals that have been loaded with the software.
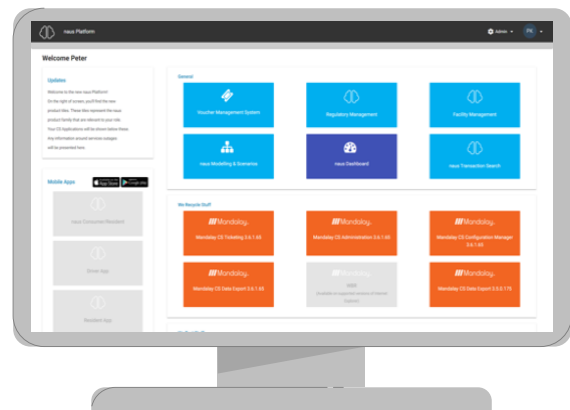
For Admin users: The Facility Product Suite is accessed via the naus Intelligence Platform offering a secure, accessible cloud environment and access to data from across your multiple facilities.

Administrative users control access and permissions for all users.

Access to additional naus applications such as Transaction Search (including image capture), Facility Analytics, Regulatory Management, Facility Management, and Resident Services becomes possible from within the same naus Intelligence Platform.

Access via local PCs or POS terminals.

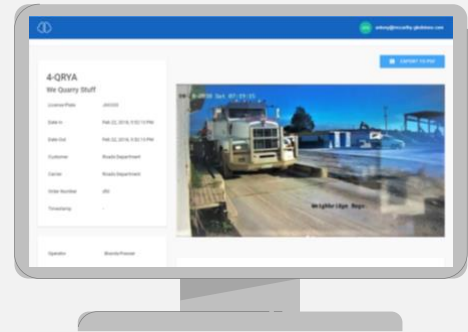**Access via the naus Intelligence Platform.**

What can you expect from product updates & releases?

Product updates and software releases are handled in the following ways.

Hosted Products

Mandalay's hosted products available via the naus Platform are updated in a fortnightly release cycle. Notification will be circulated one week prior to release to outline what will be included in the release. Confirmation of release success will be circulated post-release along with relevant release notes.

All major functionality releases will include documentation accessible via the Customer Service Portal (CSP).

Deployed Products

Mandalay's Facility Core Product offers two version releases per year – a major release and a minor service release. Releases generally occur every 6 months.

Access to one release per year is available free of charge and included with your software subscription agreement. Upgrading to new version releases is performed upon request or as required in conjunction with the support process.

Version upgrades can be managed via a User Acceptance Testing (UAT) environment to ensure a smooth deployment.

Specific release notes are made available for all version releases via the Customer Service Portal (CSP). Detailed instruction articles are created for major functionality.

Why Mandalay

Learn more about the challenges that Mandalay's **Facility Product Suite** can help you solve: **www.mandalaytech.com.au/why-mandalay**

naus Intelligence Platform

★ FACILITY PRODUCT SUITE	REGULATORY PRODUCT SUITE	RESIDENT PRODUCT SUITE
Facility Core Product	**Regulatory Management**	**Resident Management**
‣ **Facility Transactional System** - Ticketing ‣ **Facility Management** - Data Administration - System Configuration	‣ Administration ‣ Levy Queensland ‣ Chain of Responsibility (CoR)	‣ Missed Bin Collection ‣ Bin Replacement & Repair ‣ New Service Request ‣ Administration
Facility Core Services ‣ Help Desk ‣ Customer Service Portal (CSP)	**Regulatory Core Services** ‣ Help Desk ‣ Customer Service Portal (CSP)	**Resident Core Services** ‣ Help Desk ‣ Customer Service Portal (CSP)
Facility Data ‣ Transaction Search ‣ Reporting (Standard)	**Regulatory Data** ‣ Reporting (Standard) ‣ Administration	**Resident Data** ‣ Reporting (Standard)
Extension Transactional Products ‣ EFTPOS ‣ Image Capture ‣ License Place Recognition ‣ Site-Based Pricing ‣ Multi Weigh ‣ UAT Environment	**Extension Regulatory Products** ‣ Submission Reconciliation	**Extension Resident Products** ‣ Voucher Management ‣ Bulk Waste Collection ‣ Resident Self-Service ‣ Resident Authentication ‣ Resident Facility Remote Access
Extension Services ‣ Training ‣ Consulting	**Extension Services** ‣ Training ‣ Consulting	**Extension Services** ‣ Training ‣ Consulting
Extension Data Products ‣ Data & Finance Import/Export ‣ API Suite ‣ Facility Analytics & Reporting (Premium & Ultimate)	**Extension Data Products** ‣ API Suite ‣ Regulatory Analytics & Reporting (Premium & Ultimate)	**Extension Data Products** ‣ API Suite ‣ Resident Analytics & Reporting (Premium & Ultimate)

Left row labels: CORE PRODUCT / EXTENSION PRODUCTS

* Items in grey are part of Mandalay's product roadmap.

///Mandalay™
Beyond the Weighbridge

Get in Touch

Would you like to know more about the **Facility Product Suite**?

+61 7 3010 7900
sales@mandalaytech.com