WebAccess/DMP Generation/2

Remote device provisioning, monitoring and management platform.

- **Performance at Scale**
- **Extensible Architecture**
- **AssureAuth PKI**





WebAccess/DMP₂

WebAccess/DMP Generation 2 is an advanced Enterprise-Grade platform solution for provisioning, monitoring, managing and configuring Advantech's routers and IoT gateways. It provides a zero-touch enablement platform for each remote device.

With **WebAccess/DMP**, secure zero-touch pre-provisioning and pre-configuration is simple, regardless of how large your deployment is: from one device to thousands. The platform supports full multi-tenancy, with the possibility of permissions-enabled power-user oversight across tenancies.





MQTT and REST APIs

DEVICE CONFIGURATION. EDGE INTELLIGENCE.
DATA MANAGEMENT.

PROVISION. MANAGE. MONITOR. ANALYSE.

WebAccess/DMP - Solution Facts & Benefits

General

As an established specialist in IoT and M2M solutions, with proven pedigree and capability, Advantech has leveraged a wealth of contextual and environmental knowledge to bring you WebAccess/DMP Generation 2.0.

The entire software architecture has been re-imagined and re-built with Security, Performance at Scale, Reliability, Usability, Extensibility and Interoperability at the heart of every decision.

Provisioning

AssureAuth PKI is used during the device provisioning sequence. Both device and server must mutually authenticate, using Advantech's Certificate Authority as the root of trust. Once successfully provisioned via a successful bootstrapping sequence, the devices will automatically connect with the platform.

Device Monitoring

Monitoring device health is an important consideration for any management and monitoring platform. WebAccess/DMP provides secure device health monitoring, without requiring any configuration. Of course, whether this data is reported at all may be tuned, and turned off entirely, if so required. For every device, the health data is presented in a scalable time-series visualisation: thus empowering the in-depth analysis in the simplest possible way.

Interoperability and Extensibility

Technology changes fast: and in the world of IoT and ever growing complexity and scale, the necessity to interoperate with existing solutions is crucial. WebAccess/DMP is built for interoperability, and for extensibility: the solution comes complete with a secure and full-featured REST based API. Empower your world: plug in and build out.

Device Management

Device management is taken to the next level, with AssureSync Configuration Management. Using the concept of a Digital Twin Device Model, the platform is capable of managing multiple device states, for every supported device type and firmware version. The 'desired state' is a state enabled by WebAccess/DMP, on a setting-by-setting basis: when a 'desired state' is enabled, then the AssureSync engine will push the desired configuration to the desired device: and will ensure that the configuration is continuously enforced, regardless of whether that configuration setting is manipulated (maliciously or otherwise) locally at the device itself. AssureSync also works on Firmware Version and on Edge Intelligence App delivery (including version and configuration settings).

PRODUCT FEATURES

Performance at Scale

WebAccess/DMP Generation 2 has been built for scale and performance. The backend service architecture includes high-availability broker clusters, with load-balancing and elastic scale enablement. Rest assured that your needs will be met, as you grow and scale your business.

Extensible Architecture

The platform has been designed for extensibility. Using leading-edge micro-services enabled architectural best practices, together with leading-edge elastic scale technologies, load balancing and brokerage services, the platform will scale-out as necessary. The user-interface is built on our publicly available API, via our publicly available API Gateway, which enables real-time extensibility to available functionality, and the ability to integrate functionality with your existing services and infrastructure seamlessly: plug in, build-out.

AssureAuth PKI

Security is **built-in** by design: we have built a full **Public Key Infrastructure** (PKI) stack into the product suite: your connected devices are securely provisioned, certified, and authenticated.

Multi-Tenancy

Every User must belong to at least one Tenant. Every User may belong to one or more Tenancies. Every Tenant has an "Admin" User, who decides on how to grant user-permissions. For each User, for each Tenancy they belong to, unique user permissions may be granted.

AssureSync Configuration Management

WebAccess/DMP Generation 2 has incorporated industry best-practice Digital Twin Device Model technology and combined it with real-time user-interface configuration status indicators. It is possible to granularly configure every possible configuration item on every device, as a Desired State. Every device will report its actual configuration, for every configuration item, which will be stored as a Reported State. Our AssureSync Configuration Management engine will detect differences between Desired and Reported states, and automatically reconcile differences.

Edge Intelligence App management

Deploy one or many of our pre-prepared **RouterApps** (also known as "**user modules**") directly from WebAccess/DMP, to one or many of your remote devices. Manage the Apps and versions you deploy: you can "pin" a specific Router App version, for each of your selected devices, as a Desired State, and you can manage the configuration settings for each Router App, for each device it's deployed onto.

Use the device's SDK to **build your own Edge Intelligence Apps**, then use the WebAccess/DMP API to publish and deploy your own Router Apps, at scale: WebAccess/DMP enables you to build your own required platform-side user-interface automatically.

Router Apps that you create yourself will be managed through our Assure-Sync configuration management engine, just like our native Router Apps.

Secure Device Health Monitoring

Every remote device has build-in secure health-monitoring status indicators, that are reported to WebAccess/DMP, and stored in a Time-Series database: by default you get 3-months of history data, which you can zoom-in on and analyse at will, in real-time.

Location Monitoring is also available, and can be enabled to show you precise GPS based geographic-location for each of your remote devices (devices equipped with a GNSS module).

Built for Interoperability

WebAccess/DMP Generation 2 is Fully API Enabled: in fact, we built our entire user-interface application using the publicly-available secure REST based API, via our publicly available API gateway, which you can find at https://api.wadmp.com

This means that you have the power of interoperability with your existing infrastructure: integrate the available services that we provide with the services you wish to observe or consume.



SW OPTIONS

WebAccess/DMP is available as cloud hosted Solution-as-a-Service, available 24/7, with **no setup cost or time investment** required. Simply create an account for yourself at www.wadmp.com, and you're ready to go: you can add up to 5 Cellular Router or IoT Gateway devices **free of charge**, and with no expectations or constraints. There is **no time-limit** on your user-account, and **no limit to the number of users** you can add to your free Tenancy. Advantech doesn't even require you to enter a payment-method: getting started with management and monitoring of your first 5 devices is **100% risk-free** for you.

WebAccess/DMP is a hosted and managed solution: software updates, bug fixes, security updates and feature additions will be continuous and ongoing.

Regional Service & Customization Centers

 China
 Kunshan 86-512-5777-5666
 Taiwan
 Taipei 886-2-2792-7818
 Netherlands
 Eindhoven 31-40-267-7000
 Poland
 Warsaw 00800-2426-8080
 USA
 Milpitas, CA 1-408-519-3898

Worldwide Offices

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		Toll Free Seoul	080-363-9494 82-2-3663-9494	Düsseldorf	49-89-12599-0 49-2103-97-855-0	Brazil	
Taiwan Tdl Free	0800-777-111	Singapore	05 0440 4000	France Paris	33-1-4119-4666	Toll Free São Paulo	0800-770-5355 55-11-5592-5367
Taipei & IoT Campus Taichung	886-4-2372-5058	Singapore	65-6442-1000	Italy	33-1-4119-4000	Mexico	
Kaohsiung	886-7-392-3600	Malaysia Kuala Lumpur Penang	60-3-7725-4188 60-4-537-9188	Milan	39-02-9544-961	Toll Free Mexico City	1-800-467-2415 52-55-6275-2727
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Israel	072-2410527	Bangkok	66-02-2488306-9	London	44-0-870-493-1433		
		<i>Vietnam</i> Hanoi	84-24-3399-1155	Spain Madrid	34-91-668-86-76		
		<i>Indonesia</i> Jakarta	62-21-751-1939	Sweden Stockholm	46-722-293423		
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				Ireland			

WebAccess/DMP₂

COMPATIBLE WITH v2, v2i, v3 and v4 family of the advantech cellular routers & gateways.











353-91-792444

v2 LR77v2, UR5iv2, XR5iv2 v2i ICR-2xxx v3 ICR-3xxx, SmartFlex, SmartStart v4 ICR-4xxx

