



Vordel API Server v7.0

Release Announcement

Monday 9 July, 2012

Vordel is pleased to announce the General Availability of Vordel API Server v7.0.

Vordel API Server 7.0 can be downloaded from the Downloads page on the Vordel Extranet portal: <https://extranet.vordel.com/>

For more information please contact your Account Manager.

Product Re-naming: Vordel API Server

The product has been re-named to Vordel API Server from Vordel Application Gateway.

First, Vordel's product is more feature rich than a typical gateway. With the expanded capabilities added in the last two years around API management, Cloud Service Broker, and identity middleware, more and more customers are using Vordel's product to deliver Cloud and mobile enabled APIs.

Second, enterprises are taking an "API first" approach to rapidly deliver business services by leveraging backend SOA and application infrastructures. APIs are becoming as important as the backend applications. Customers are using Vordel's product to provide a standardized operating platform for the management, delivery, and security of APIs of all kinds.

Vordel API Server is a more accurate name describing Vordel's technology and how customers view Vordel's technology strategically – unifying the capabilities of application gateway, API management, Cloud Service Broker, and identity middleware. The new name reflects Vordel's value as a unified API delivery platform to enable agile business service delivery via Cloud, mobile, Web 2.0, as well as traditional B2B and SOA channels.

Delivery Platform for Web, Cloud & Mobile APIs

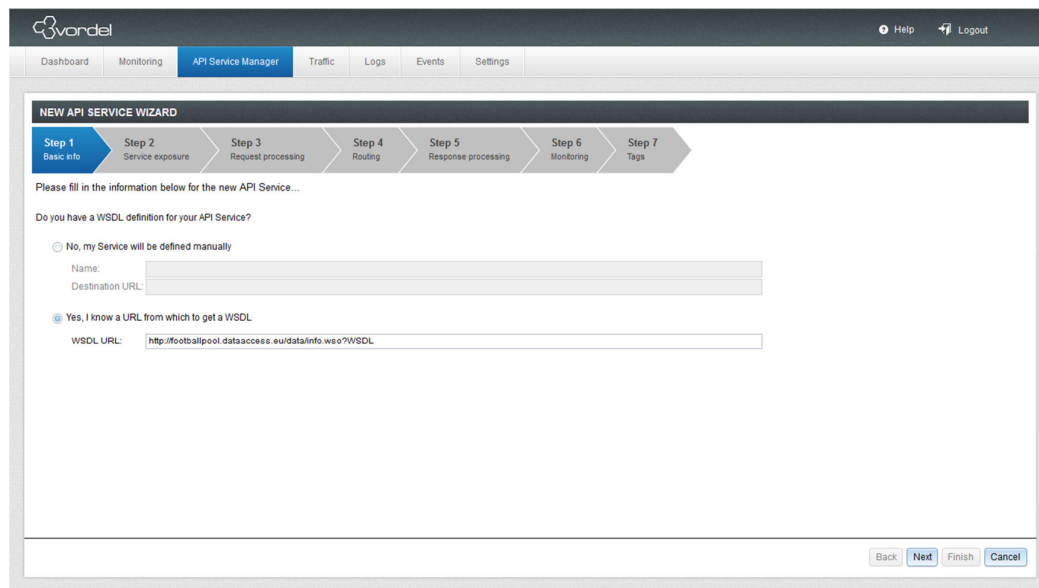
Vordel API Server 7.0 provides an API delivery platform to enable standardized operational support for Cloud-based services, mobile computing and mash-up web applications. To support this capability, API Server 7.0 introduces new features focusing on REST, JSON and OAuth.

API Service Manager

Vordel API Server 7.0 introduces API Service Manager, a new web-based tool for virtualizing REST APIs and SOAP Web Services. API Service Manager is hosted in Vordel Manager, the new web-based administration console (see below).

API Service Manager enables operational users, rather than policy developers, to virtualize HTTP-based REST APIs and SOAP Web Services by applying pre-existing packaged policies,

such as authentication and traffic management, rather than developing new policies. This enables organizations to assemble a library of packaged policies that represent their standard, corporate policies that can be quickly and easily applied to REST APIs and SOAP Web Services. These packaged policies are created in Policy Studio using the new Policy Package capability (see below).



API Service Manager complements Policy Studio to provide a full spectrum of tools for virtualizing APIs and Services. Policy Studio will remain the primary development tool for custom policy development, including creating packaged policies for use in API Service Manager, and for virtualizing non-HTTP(S) services.

JSON

Vordel API Server 7.0 supports JSON as a first-class citizen, providing equivalency with XML filter support, including bi-directional JSON ↔ XML conversion.

API Server 7.0 provides these filters for working with JSON messages:

- JSON Schema Validation filter to validate JSON messages against a JSON schema (<http://json-schema.org/>).
- JSON Path filter to read elements from JSON messages.
- JSON Add and JSON Remove filters to add and remove elements and arrays from JSON messages.
- JSON to XML and XML to JSON filters for conversion between JSON and XML messages.

OAuth 2.0

Vordel API Server 7.0 supports the OAuth 2.0 authorization framework, implementing both the authorization server and resource servers. In addition, for the Client Credentials authorization grant, API Server 7.0 will support HTTP Basic Authentication and the JWT Bearer as client application credentials.



API Server 7.0 provides a client application registry where the details of client applications using OAuth can be registered and managed. This registry is implemented using the new Key Property Store (see below) and provides a REST API to manage the client application profile. A sample registry management UI using the REST API is provided.

API Server as a Platform

Vordel API Server 7.0 provides a platform to develop and deploy multiple, partitioned API solutions running on shared, and increasingly virtualized, infrastructure.

Domain and Group Management

Vordel API Server 7.0 introduces domain and group management to simplify the centralized management and monitoring of distributed groups of API Servers.

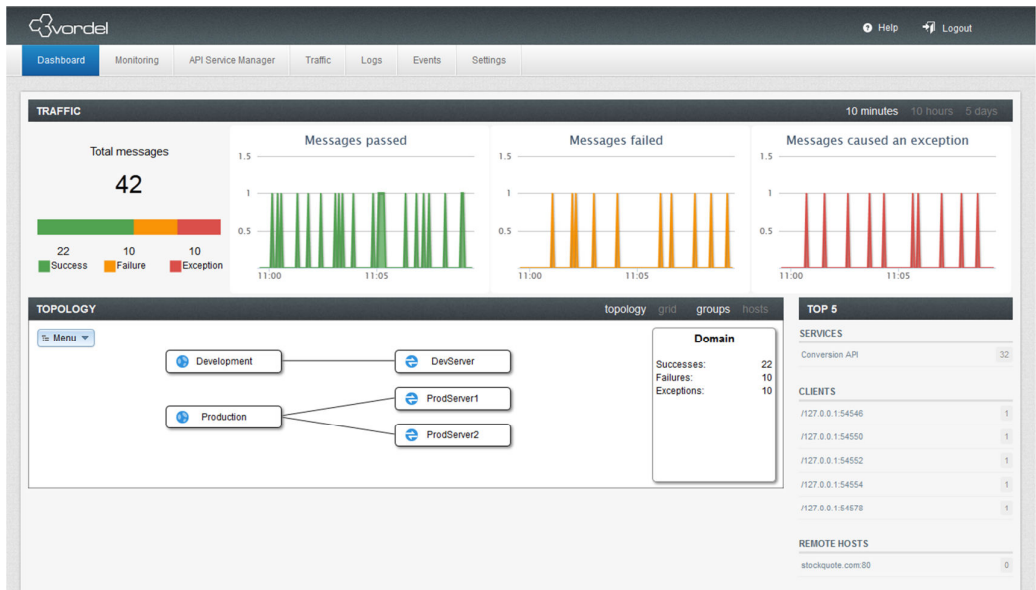
A domain is a distinct administrative entity consisting of multiple groups, which in turn consist of one or more API Servers. A group will run a single configuration across multiple API Server instances, enabling high availability and failure. New deployment capabilities simplify the deployment of policies and configuration to all API Servers in the group.

This domain and group management capability is key to Vordel's strategy of managing API Servers in highly dynamic virtualized environments, whether on-premise or in the Cloud, by separating the logical and physical architectures. Groups represent the logical architecture, the API Servers the physical architecture. Policies, addressing a specific capability, are packaged into a single configuration which is deployed to the target group. The number of and the physical location of the API Servers in that group is managed independently of the policies and their configuration.

Vordel Manager

Vordel API Server v7.0 introduces Vordel Manager, a unified, web-based administration console to simplify the operational management of the API Server environment.

Vordel Manager unifies all the existing web-based administration tools into a single web-console with a modern look-n-feel. In addition, Vordel Manager operates at the domain and group level, aggregating monitoring information across multiple groups and API Servers, and eliminating the need to connect to individual API Servers to perform administrative tasks.

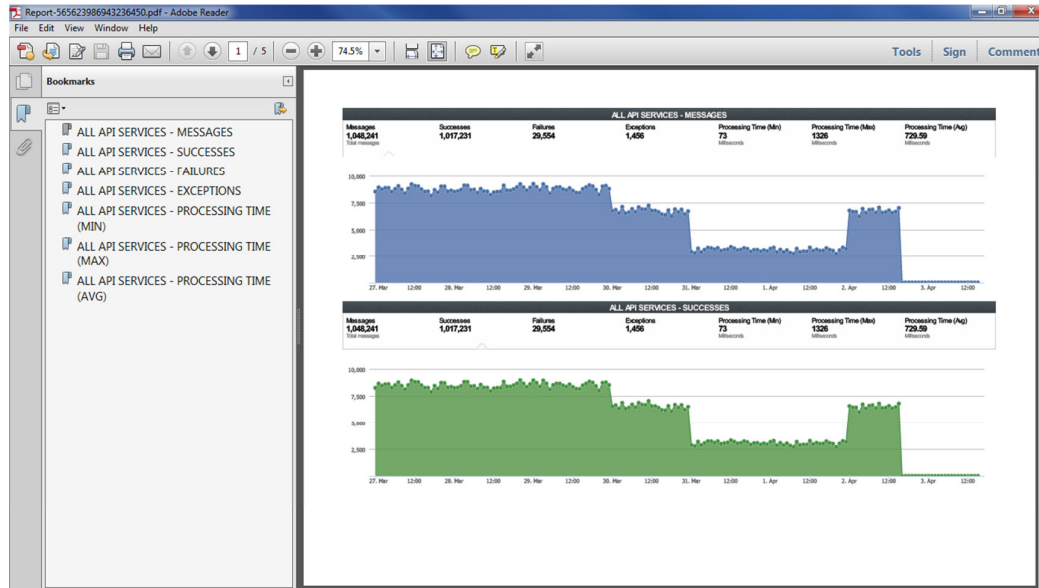


Vordel Manager provides these capabilities:

- Dashboard displaying the API Server domain topology and real-time overview of message traffic by domain, group and API Server.
- Real-time monitoring of metrics of system, service and remote host performance and communication.
- Detailed monitoring of message traffic by group and instance, enabling easy identification of exception messages across the domain and drilling into the message details.
- API Service Manager for virtualizing REST API and SOAP Web Services.
- Unified view of audit, alert and SLA alert messages across all API Servers in the domain.
- Viewing of audit and trace logs for individual API Servers.
- Managing the dynamic settings of individual API Servers.

Vordel Analytics

Vordel Reporter has been re-named as Vordel Analytics.



Vordel Analytics provides a new web-based user interface that is consistent with the new Vordel Manager to ensure a common user experience. In addition, PDF reports can now be scheduled in the Vordel Analytics web-based UI rather than having to use Policy Studio.

Enabling Meta-data Driven Policies

Vordel API Server 7.0 introduces two key capabilities for enabling meta-data driven policies: Key Property Store (KPS) and Selectors. Policy configuration information can now be externalized from the policy definition and looked up when the policy is executed. This enables the policy behaviour to be dynamically modified at run-time.

Key Property Store

This is a write seldom, read frequently cache for exposing keyed sets of properties to policies. At run-time policies look up configuration information from the KPS using the new Selector mechanism (see below).

The KPS provides a REST API for creating and managing the configuration information in the KPS. A scripting capability is provided that will generate a web UI that is specific to the KPS data – this web UI works against the REST API, providing a user interface to manage the KPS data. This allows operational staff to manage policy configuration information dynamically at run-time independent of policy definitions.

The KPS has a number of backing stores:

- File store with the KPS data stored as JSON.
- Database store using a generic JPA schema (the KPS data is stored as serialized Java objects).



- Database store using a custom database schema. This allows existing databases, e.g. a routing database or a trading partner management database, to provide the configuration information to drive policy execution.
- API Server Certificate Store. This is a read-only store allowing policies to dynamically look up certificates.

Selectors

Vordel API Server 7.0 introduces Selectors as a new mechanism to look up information at run-time from the KPS, from the message whiteboard and from the environment file. Selectors are far more powerful than the existing attribute expansion capability in v6.3.

All filters in Policy Studio have been extended to use Selectors, enabling the configuration of those filters to be dynamically driven from data in the KPS, from the message whiteboard and from the environment file.

Policy Packages

Vordel API Server 7.0 introduces Policy Packages as a mechanism for packaging and distributing common policy logic. Policy Packages are “black boxed” containers with a defined interface, with the internal policy implementation hidden from and unchangeable by users of the Policy Package.

Policy Packages can be used in both API Service Manager and Policy Studio. In Policy Studio the available Policy Packages are displayed in the Filter menu on the right hand side, from where they can be dragged onto the canvas and used in circuits.

Solution Packs

Vordel’s strategy is the provision of domain specific solutions, running on the Vordel API Server, delivering rapid deployment, ease of use and best practice. These domain specific solutions will be delivered as Solution Packs consisting of pre-built policies and Policy Packages, KPS schema definitions, and web UIs for managing the KPS data.

Vordel API Server 7.0 introduces the ability to package domain specific solutions into a solution pack archive that can be distributed and deployed on API Servers. Solution pack archives are opaque when deployed on API Servers, with their contents hidden. Also, the contents of solution pack archives are not promoted between environments with custom developed policy configuration – they need to be deployed in each environment independently.

Further Information

Short video demo of the Vordel API Server 7.0: <http://www.vordel.com/products/index.html>

Whitepaper on Next Generation API Delivery Platform examining how the application architecture is changing to enable the rapid delivery of business services via APIs:
<http://resources.vordel.com/index.php/next-generation-api-delivery-platform-whitepaper/>



Whitepaper describing Reference Architectures for delivering Enterprise APIs for Web & Mobile:

<http://resources.vordel.com/index.php/enterprise-api-management/>

Webinar on architecting your delivery platform for the API Economy, guest speaker Randy Heffner, Vice President and Principal Analyst with Forrester Research, Inc.:

<http://resources.vordel.com/index.php/architecting-your-delivery-platform-for-the-api-economy/>