one One Network Enterprises™

One Network's DevNet:
Frequently Asked Questions

How to Rapidly Build Powerful Multi-Party Business Applications in the Cloud

One Network's Developer Network (DevNet) is a unique development environment and framework for creating multi-party, multi-echelon business solutions for supply chain management that run in the cloud. DevNet is the powerful tool behind One Network Enterprises' (ONE) industry-leading solutions recognized by Gartner, Nucleus Research, IDC, Chainlink Research and other industry analysts.

Below are answers to some of the most common questions we receive about DevNet.

WHO IS DEVNET FOR?

Global enterprises can use DevNet to build your own applications, or customize and enhance existing ones to suit your needs. It's also used by One Network's own internal development organization to build supply chain, logistics and industry-specific applications on the NEO Platform which serves over 75,000 organizations.

- **Influential Industry Players**, such as large enterprises, industry connecting organizations, or supply chain influencers, empower their employees or members and create multi-party cloud solutions on a digital network that serve your organization and industry.
- **Implementation Partners** specialize in implementing multi-party, network software for other organizations, including commercial companies, non-profits, and government agencies.
- **Independent Software Vendors (ISV's)** make and sell powerful, multi-party, cloud solutions for use by customers.
- **Information Technology (IT) Departments** make, maintain, or customize multi-party, cloud solutions that run "in-house" and connect all functions and systems in a "single version of the truth."

WHY DO DEVELOPERS AND THEIR ORGANIZATIONS LOVE DEVNET?

DevNet supports and enables multi-party processes and data models. It eliminates integration complexity as each party only connects once to the network and then can transact with any other party. Applications on the NEO Platform run on a real-time, "single version of the truth," dramatically simplifying data management and development. Other benefits of DevNet include:

- **Powerful modeling capabilities**. It facilitates data and process modeling, user interface and report development, integration supporting industry-standard protocols and data formats, and server-side development (e.g. asynchronous jobs).
- **Open technologies and standards**. Built and based upon the Eclipse open-source IDE, One Network's SDK uses open technologies and standards. Developers can leverage their knowledge in Java, SQL, and JavaScript when developing on One Network's platform.
- **Build any multi-party application**. It allows you to rapidly develop both Network applications and Supply Chain functionality. You can leverage data from across the network (internal and external systems), and create powerful multi-party business processes, workflows and reports. Use One Network's NEO intelligent agents to analyze, optimize and automate processes and tasks.
- **Easy data persistence**. A powerful Object Relational Mapping system makes it easy to access and persist data without writing cumbersome database queries.
- **Rapid set up of integrations and web API's**. Quickly connect, consume, and use data from other systems and services.
- **A Role Based Access Control Framework**. Organizations can precisely control what users (internal and external) can see and do with their data, based on their organization and role.

One Network Enterprises™

- **Module Programming Framework**. Modular architecture so you can leverage existing functionality in your apps for rapid development. Modules also make maintenance and deployment easier and faster.
- **Grid Computing**. Grid computing capabilities mean that processing remains fast, as applications scale to manage huge volumes of data across large networks.
- **Support for modern programming tools**. Exploit your current knowledge and skills, and leverage the latest libraries and frameworks, for example, ReactJS.

WHAT KINDS OF TOOLS DOES IT INCLUDE?

DevNet provides tools for creating data models by visually defining a model with all its attributes, references and integrity constraints, and allows developers to configure business processes and permissions upon those models. The platform automatically creates all related software artifacts (tables, indexes, Java objects). Tools and products available to developers include:

- **One Network's NEO Platform and Software Development Kit (SDK)** – A development platform and software development kit that help you rapidly build supply chain, transportation management, or other Network or multi-party solutions.
- **NEO 3.0** - A complete and proven supply chain and transportation management solution built on the NEO Platform and powered by NEO intelligent agents. Use DevNet to customize it to fit your needs or those of your customers.
- **NEO Module Store** – An online repository of modules for ONE's NEO Platform. Find existing modules to quickly add functionality to your application. Add your modules to the store for others to buy and use.
- **Developer Resource Center** – An online portal designed to teach you all you need to get up and running on the NEO Platform fast. Learn how to develop multi-party solutions using ONE's NEO Platform, SDK, and modules.

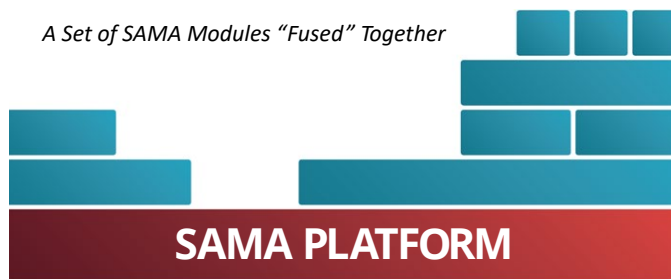## WHAT ARE SOME ADVANTAGES TO DEVNET APPLICATIONS?

The NEO Platform and SDK enable developers to rapidly build, customize, and run a Network application. The platform's design addresses challenges of multi-party networks.

Network Ready

The NEO Platform's unique strength is that it enables you to build Network applications to manage business processes and workflows that span multiple trading partners. It was conceived and designed from the start to enable a network of enterprises to interact and transact seamlessly and in real time. This makes it ideal for applications for managing supply chains from end-to-end, source to shelf (and back).

Modular

NEO Platform applications are modular. They use One Network's "Strongly Additive Modular Architecture" (SAMA). This modular architecture makes it easy to add new functionality on top of an existing system. It enables rapid development and deployment, especially when compared to conventional enterprise resource planning (ERP) systems. The SAMA architecture is designed to enable the rapid creation of sophisticated applications. These are not possible to build with "low code" platforms. Finally, you can layer modules on top of one another in the SAMA architecture. This lets the modules build on each other's data and methods, for maximum code reuse and accelerated development.

A Set of SAMA Modules "Fused" Together

SAMA PLATFORM

Data Model Driven

The NEO Platform makes it easy to define the structure of data in the system. The ONE SDK lets you define which fields and data types should be present for each data model. ONE's NEO Platform also abstracts away complexity involved with creating database tables. That means no more Create, Read, Update, Delete functions. Instead, you use Java methods for easy access to the data.

Precise Control Over User Permissions

User permissions are a powerful feature of the NEO Platform. The ONE SDK provides a graphical user interface for creating and defining precise user permissions. You can do this based on Role Type and Enterprise, Organization, or Site.

One Network Enterprises™

Quickly Build and Modify User Interfaces
The NEO Platform simplifies user interface development. With a simple XML format, you can quickly create menus, input forms, and reports. You can configure these user interface components to display differently based on the user's role and permissions.

Integrations Made Simple with a Visual Editor
Integrations are easy to set up with the NEO Platform. Creating a REST API is fast and easy. Simply define the fields, format, and permissions in the SDK using our friendly graphical user interface.

Single Version of the Truth (SVOT)
One Network's NEO Platform also allows you to create Single Version of the Truth (SVOT) applications. SVOT applications understand the relationships between data in different NEO Platform systems, for example, between entities such as orders and shipments. Use it to build applications which are reusable and with data normalized across systems.

Harness Artificial Intelligence and Intelligent Agents
The NEO Platform supports autonomous agents. Intelligent agents can make and execute decisions. For example, they can recommend problem resolutions to users, or execute the recommendations autonomously. You can configure them easily using the NEO SDK, and based on the needs of enterprises. You can modify and build new custom intelligent agents to perform actions based on system data.

HOW DOES ONE HELP DEVELOPMENT PARTNERS?

We help partners join the ONE ecosystem with several approaches:

1. We provide the NEO Platform itself, along with a Software Development Kit for development. This allows Developer Network customers to extend and build on top of existing NEO 3.0 functionality.
2. We provide and manage the online learning portal that reduces barriers by sharing knowledge. This gives Developer Network customers access to documentation and training.
3. We identify, communicate with, and engage potential partners to bring them into the ecosystem.
4. We act as an intermediary to help connect expert Application Developers with supply chain solution providers.
5. Finally, we understand that developers only stick around if they can monetize their efforts. So, we provide a clear path for developers to get paying users in the forms of hosting/deployment support and a module store. This also increases One Network's range and offering through third party development of modules.

Contact One Network to find out how you can use DevNet to build, run and maintain powerful network applications in the cloud.

📞 +1 866 302 1936
✉ inquiries@onenetwork.com
🌐 www.onenetwork.com