

Network**Solutions**.[®]

WHOLESALE XML FAQ

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TABLE OF CONTENTS

TABLE OF CONTENTS.....	ii
1.0 How Does a Partner Get Started?	1
2.0 What is a Typical Implementation Schedule?	1
3.0 What Are Some of the TLD Dependent Behavior?	2
4.0 What is the Performance of the Wholesale system?.....	2
4.1 What is the Performance for Domain Creation?	2
4.2 What is the Performance for Name Availability?	2
4.3 What is the Performance for Modify/Delete?	2
5.0 What Are a Partner's Capabilities In the Wholesale Model?.....	2
6.0 What Types of Notifications will a Partner receive?.....	2
7.0 What is the Operational Test Environment (OTE)?	3
7.1 What issues are there with Create Domain in the OTE?	3
7.2 How Does a Partner Effectively Use OTE?.....	3
7.3 What is OTE Certification?	4

This FAQ applies to the Network Solutions Wholesale System as accessed by the Network Solutions Partner Protocol (XML API).

1.0 HOW DOES A PARTNER GET STARTED?

The Network Solutions Wholesale System allows the management of tasks associated with the full lifecycle of a domain. Each Partner decides what capabilities to implement based on their particular business needs. However, based on the requirements of the Wholesale Model, certain capabilities are required. To perform basic domain name registrations, the following commands are required:

- Name Availability
- Customer Account Creation
- Create Domain
- Delete Domain

The choice of the above minimum capabilities is based on the following logic. A Partner first performs a name availability to determine if a domain name is available. Since the Network Solutions Wholesale Model dictates that *customers hold products*, the Partner then creates a customer. Once the customer account is created, the Partner purchases the domain name on behalf of the customer. Finally, delete functionality is important to ensure that the Partner is able to delete a registration.

With this minimal set of functionality, a Partner is able to create registrations in the Network Solutions Wholesale System.

2.0 WHAT IS A TYPICAL IMPLEMENTATION SCHEDULE?

For each Partner, an implementation schedule is ultimately driven by the Partner's business requirements and overall process flow. The high-level implementation schedule is as follows:

- Understand the Network Solutions Wholesale Model
- Sign contract with Network Solutions
- Obtain the XML software development kit
- Choose capabilities that Partner wants to deploy on initial release
- Develop software capability using the Network Solutions test environment
- Perform QA of Partner's production software system
- Obtain certification from Wholesale Technical Support Team
- Wholesale Technical Support Team creates production account for the Partner
- Deploy software in Partner's production environment
- Final test/confirmation that software is performing correctly in the Network Solutions production environment
- Go live to Partner's end-customers

Network Solutions provides access to the Wholesale Technical Support Team during a Partner's software development cycle. The Wholesale Technical Support Team can answer technical questions about the Network Solutions Wholesale System, and assist a Partner in integrating access to the Network Solutions Wholesale System into the Partner's environment.

3.0 WHAT ARE SOME OF THE TLD DEPENDENT BEHAVIOR?

TLD specific behavior as of DTD release 3.1 is documented in the XML Reference Manual and User Guide.

4.0 WHAT IS THE PERFORMANCE OF THE WHOLESALE SYSTEM?

The performance of the Network Solutions Wholesale System is highly dependent on the load on the system. The performance numbers represented in this section should be considered typical values.

4.1 What is the Performance for Domain Creation?

The performance of the Network Solutions Wholesale System is tuned primarily for domain creation and name availability. During normal load, successful domain creates for the com/net/org registry take an average of between 4-8 seconds.

4.2 What is the Performance for Name Availability?

Name availability is dependent on the registry for the given TLD. Name availability for a single domain name for the com/net/org registry, takes an average of less than a second.

4.3 What is the Performance for Modify/Delete?

The performance for other commands, such as modifications and deletes, can be slower than name availability and domain creation. This is based on the assumption that modifications and deletes are not the bulk of commands that a Partner is performing.

5.0 WHAT ARE A PARTNER'S CAPABILITIES IN THE WHOLESALE MODEL?

The Partner's capabilities in using the Network Solutions Wholesale Model are the full lifecycle management of domain name registrations. A Partner can check name availability, purchase domains, renew domains, and delete domains. A Partner may also update the information associated with the registrant and other contacts on a domain.

6.0 WHAT TYPES OF NOTIFICATIONS WILL A PARTNER RECEIVE?

In the Network Solutions Wholesale Model, Network Solutions typically communicates with the Partner. Network Solutions only communicates with Partner's end-customers in specific instances where the completion of a transaction, or when an ICANN or registry policy, requires us to do so. Network Solutions will not send mass-marketing communications to end-customers that are registered with us through a Partner.

Failure notifications are always sent to the provided *Failure Notification* e-mail address (required) that the Partner provides. Success notification is optional, and will be enabled only if a *Success Notification* e-mail address is provided.

7.0 WHAT IS THE OPERATIONAL TEST ENVIRONMENT (OTE)?

Before a Partner is given access to Network Solutions Production, the Partner is provided access to the Operational Test Environment (OTE). A Partner can use OTE to test and develop their production software system. OTE mimics the functionality of the Network Solutions Production Wholesale system. OTE does not have the level of redundancy and hardware support of Network Solutions production environment, but functionally is identical. OTE consists of an instance of the Network Solutions back-end databases, and a non-authoritative instance of each registry which Network Solutions production systems support. Network Solutions controls the Network Solutions back-end databases, but the respective registry controls the content of the associated registry databases.

The registries used in OTE are outside of the control of Network Solutions. This can lead to behavior that would not occur in Network Solutions Production. For instance, if an external registry refreshes their registry, making all domain names suddenly available, the Network Solutions back-end databases will be out-of-sync with the OTE registry in question. This can lead to unexpected behavior if the Partner tries to modify or renew such a domain name. Any action that would require communication with the registry in question will fail because after the refresh, the domain would no longer be in the registry with Network Solutions as the registrar.

7.1 What issues are there with Create Domain in the OTE?

Because the registries are outside of the control of Network Solutions, this can lead to unexpected behavior when purchasing a domain name in OTE.

If a Partner does a name availability check for a domain name in OTE, and the request says that the name is available, a request to purchase the domain can still fail. This is because there is a chance that the domain name was at some point registered in the Network Solutions back-end databases used in OTE. If the domain is already in a back-end database, the order to purchase this domain will fail in some unexpected manner, due to constraints at the database layer. This type of behavior would not occur in the Network Solutions production environment. To work around this behavior, it is advised that Partners always use unique domain names in OTE.

7.2 How Does a Partner Effectively Use OTE?

The primary purpose of OTE is to assist the Partner in developing the Partner's production software. OTE will mimic the functional behavior of the Network Solutions production environment. Because of the previously mentioned synchronization issues with the Network Solutions back-end databases and the registry databases, it is safest for the Partner to create all the data that the Partner needs to develop/test their software. It is always best to use unique domain names. A simple way to do this is to append the time in milliseconds to the end of the name of the test being run. (For instance, `create-registration-test-1-79182378931287934.org`.) In this way, the Partner can ensure that if a name shows as

available, the name will most likely be available in the back-end systems because the domain name is unique. Additionally, if the Partner wants to test failures for instance of domain availability, the Partner should create a unique domain name(s), and then use that name in the Partner's negative tests. A Partner should not rely on `networksolutions.com` (for example) as always being *not available*.

7.3 What is OTE Certification?

Before a Partner is given access to the Network Solutions production environment, the Wholesale Technical Support Team will request the Partner to go through a simple Certification Test in OTE. This certification test should be performed with the software the Partner plans on deploying. The certification test is tailored to the Partners desired capabilities. In other words, the certification test will not require a Partner to create a host if the Partner has no desire to perform this function. The certification test is a simple exercise of each of the capabilities that a Partner desires to implement. The Partner's Wholesale Technical Support Team will review the Network Solutions Wholesale System logs to ensure that the Partner's software implementation is not having any unexpected side effects.

A Partner should set aside time in the Partner's implementation schedule to account for the OTE Certification Test.