Using the Custom Profile Parameter in NAV 2015

Implementation
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White Paper

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Microsoft Dynamics NAV

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Custom Profile Parameter

In Dynamics NAV 2015 a new feature called the Custom Profile Parameter has been introduced, which enables users to load a desired profile on Tablet App and Web-Client by changing a single URI parameter.

This document gives an overview of how this new feature works, with an introduction to its terminology, implementation considerations and a look at how it functions behind the scenes.

Scenario overview

This section describes how the Custom Profile Parameter is used in Microsoft Dynamics NAV 2015.

User Story

Nancy works at the office on Mondays and Fridays, and visits her favourite customers the rest of the week. She works on her dual-screen desktop PC whilst at the office, and carries her handy tablet with her when on the road. While she needs access to the full functionality of NAV on her desktop, she only uses a subset on her tablet (Contacts, Customers, credit checks, sales documents in different views, sales history and various customer and sales-related reports) in addition to a few special pages such as the Customer location map and the Product Catalog.

Problem

Nancy logs in with the same credentials that are assigned the default same profile (rolecenter) on her desktop PC and tablet, and therefore has access to the same set of pages on both form factors. The tablet experience must look right on the reduced screen size and therefore the page may have to be formatted different from the desktop experience. How does Viktor, her NAV administartor, achieve this?

Solution

A new, optional URI parameter (?profile=<id>) has been introduced for the Tablet App and the Web-Client, which enables users (or their NAV administrators) to load a desired profile simply changing its value.

Terminology

- **Tile**: The tile which is put (by default) on the start screen by the Tablet App upon installation; there can only be one tile per device.

- **Button / shortcut**: A button or shortcut which contains a link that launches the Tablet App with certain parameters; it can be in an e-mail, on the home screen etc. and multiple ones can be configured.

- **Default Profile**: The profile set as default in the Personalization table for a certain user (can also be specified by marking a Profile as default in the RTC client).

- **Custom Profile**: The profile that is targeted in the URI the Tablet App or Web-Client is accessing (specified via the ?profile=<id> parameter).

- **Configured Profile**: The profile that is targeted (it will be the default profile for a user if no custom profile is explicitly specified) when the link that the Tablet App will use to launch NAV is configured.

Implemetation Considerations

Every time the Web-Client or the Tablet App accesses the NAV web service, a specific profile is targeted.

When no profile is explicitly stated (via the ?profile=<id> parameter in the URI), the current default profile (specific to the user) will be targeted.

When the Tablet App is initially started (after installation) by clicking the tile, a configuration link has to be specified and that link will be accessed every time the tile is used to open the app on the tablet.

If a different profile is to be used with the Tablet App, the user has to either log-out and re-configure the app link, or use customizable buttons / shortcuts to launch the Tablet App with different profiles (via the ?profile=<id> parameter in the URI).

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How it works

Anatormy of a Profile Parameter

Both the Web-Client (accessed via a web browser) and Tablet App need to target a NAV web-service via a link (thus accessing a NAV server deployed on a machine).

In order for the service to be accessed, a URI has to be specified; the format of a URI is:

https://navdevvm-0030:48900/nav_main_instance1/?profile=BOOKKEEPER

https:// = protocol   **nav_main_instance1** = NAV server name
navdevvm-0030 = machine name   **?profile=BOOKKEEPER** = profile parameter
48900 = service port

Note: additional parameters may be specified in the URI in a similar way to the profile parameter

Whenever any device uses either the Web-Client or the Tablet App to access the service, the requests are handled similarly; the server will not be able to differentiate between the different types of devices accessing it. The only difference is that, when the Tablet App is used, a hidden tablet.aspx parameter is used in the URI, which causes the output to be formatted for a tablet interface; the same view can be accessed on a Web-Client if the tablet.aspx parameter is written manually in the URI.

A profile is *always* targeted by a URI, even if it is not specifically specified using a custom parameter (?profile=<id>); in the latter case, the default profile will be targeted.

For example, suppose there is a user account with the default profile set to "Sales Manager". In that case accessing:

https://navdevvm-0030:48900/nav_main_instance1/

is equivalent with accessing

https://navdevvm-0030:48900/nav_main_instance1/?profile=Sales%20Manager

but accessing

https://navdevvm-0030:48900/nav_main_instance1/?profile=BOOKKEEPER

will specifically target the BOOKKEEPER profile, regardless of what the default profile is set to.

The Custom Profile Parameter always "wins", in other words, it overrides all defaults.

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Considerations when using tiles on a Tablet App

When using the Web-Client, the link will always have to be clearly written in the address bar and will be accessed with whatever parameters are specified.

When using the Tablet App, you can either access it via the tile or via custom shortcuts / buttons which are set to launch it with certain parameters.

The tile of the Tablet App works differently from shortcuts / buttons.

a) If the Tablet App is not closed (therefore running and minimized), clicking on the tile will just switch to the opened app (basically just maximizing it). This means that the last used URI (including the last used profile and the last viewed page) will be accessed.
If, on the other hand, the Tablet App isn't closed and a custom shortcut / button is used, then it will be re-opened with the parameters specified by the shortcut / button (it is the equivalent of closing the app and re-opening it using the shortcut / button)

b) If the Tablet App is closed, clicking the tile will open it with whatever parameters the configuration link had (which means it will be opened with the configured profile). In this case, the tile will behave similarly to a button / shortcut.

c) The Tablet App has to be configured manually the first time is opened using the tile (after it is installed), even if it has been accessed before by using a shortcut / button. Once configured, in order to be able to re-configure the app link, the user has to sign out and manually write the new link to be targeted.

Using Shortcut Buttons

A shortcut / button can be configured to use the Tablet App with specified parameters if it is set to execute a command similar to:

ms-dynamicsnav://navdevvm-0030:48900/nav_main_Instance1/?profile=SMALL%20BUSINESS

ms-dynamicsnav:// = protocol   **nav_main_instance1** = NAV server name
navdevvm-0030 = machine name   **?profile=BOOKKEEPER** = parameters
48900 = service port

 A useful way to create such shortcuts / buttons for the Tablet App can be to either make a Windows short-cut and modify its target to a command similar to the one above or to create an image targeting a link similar to the one above (the images can be used in messages and emails)

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Differneces in the Reconnect experience

If a Web-Client or Tablet App are inactive for a certain amount of time, the session will time-out triggering a reconnect message.

When using the Web-Client, if the user clicks on the "Reconnect" button, they will be automatically switched to a new session with the default profile.

When using the Tablet App, if the user clicks on the "Reconnect" button, they will be automatically switched to a new session with the profile most recently used by the app on that specific device.

Conclusion

Custom Profile Parameters are a simple and effecive way to deliver targeted and form factor appropriate experiences to users on the Web-Client and Tablet App.

This opens up an easy way for users and NAV exerience designers to switch profiles without requiring a visit to the personalization configurations.

Implementation is as simple as sharing a correctly formated URI via a link, shortcut or button.

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