

# Sequence Kinetics SP1

## Release Notes

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## Contents

<b>INTRODUCTION .....</b>	<b>4</b>
<b>INSTALLATION .....</b>	<b>4</b>
NEW SEQUENCE 7.1 INSTALLATION.....	4
UPGRADING FROM SEQUENCE V6.4.4 OR LATER.....	4
UPGRADING FROM SEQUENCE VERSIONS 6.4.3 OR EARLIER.....	4
<b>NEW FEATURES .....</b>	<b>5</b>
ADMINISTRATION ENVIRONMENT.....	5
DYNAMICS CRM ACTIVITIES .....	6
PROCESS <sup>TO GO</sup> MOBILE APPLICATION .....	8
USER PHOTOS .....	11
MAIL SENDER CONFIGURATION OPTIONS .....	12
<b>ENHANCED FEATURES .....</b>	<b>14</b>
UX STUDIO.....	14
VERSION MANAGEMENT .....	18
ACTIVE DIRECTORY SYNCHRONIZATION SERVICE .....	19
SEQUENCE ANALYTICS.....	19
SUB WORKFLOW SELECTION AND VARIABLE MAPPING.....	21
WEB SERVICES .....	21
EXPRESSIONS .....	22
AUTHENTICATION .....	22
WORKFLOW EXECUTION .....	22
<b>WEB CONFIG MODIFICATIONS .....</b>	<b>22</b>
<b>RESOLVED ISSUES .....</b>	<b>23</b>
<b>RESOLVED SUPPORT CASES.....</b>	<b>24</b>
<b>ADDRESSED CRS .....</b>	<b>24</b>
<b>KNOWN ISSUES .....</b>	<b>24</b>

## Introduction

Sequence Kinetics SP1 (SEQUENCE v7.1) is an official product release incorporating new features and fixes. For a complete list of Sequence Kinetics's major features, [click here](#). This document details the features added in the latest update, SP1. Sequence Kinetics SP1 was approved for release by PNMsoft QA on November 14<sup>th</sup>, 2012.

## Installation

You can download the installation files from the [Download Centre](#).

SEQUENCE 7.1 installation requires Windows Server 2008 SP2 or later, and a 64-bit processor with 4 cores.

### New SEQUENCE 7.1 Installation

1. Unzip the file *7.1.0.0Installation/Setup Or Upgrade/7.1.0\_Installation.zip*.
2. Run *7.1.0\_Setup.exe* (it is in the zip file).
3. Follow the instructions in the [SEQUENCE 7.0 Installation Guide](#) in the [Knowledge Centre](#).

### Upgrading from SEQUENCE v6.4.4 or later

1. Verify that version 6.4.4 or later is installed on your server.
2. Backup the configuration files and your database.
3. Free up system resources:
  - i. Use the IISReset command-line utility to reset the IIS.
  - ii. Stop the Windows Service and the Active Directory Service.
4. Download and run the file:  
*7.1.0.0Installation/Setup Or Upgrade/7.1.0\_Installation.zip*
5. Run IISReset.

*Note: If you are using a VPC, please consider backing it up before the upgrade.*

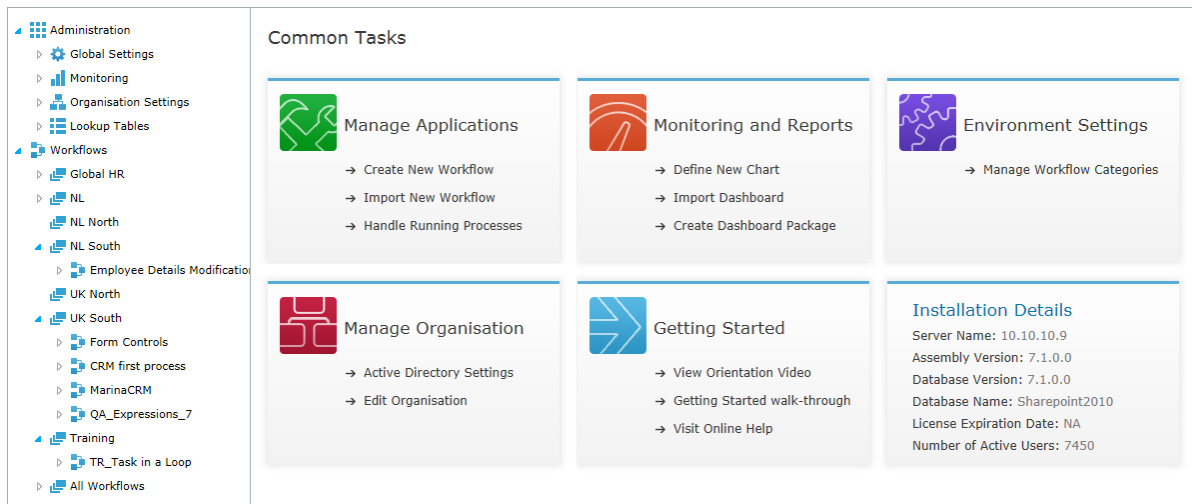
### Upgrading from SEQUENCE Versions 6.4.3 or Earlier

A direct upgrade to version 7.1 has not been tested and may cause server instability. Therefore, please update/upgrade your SEQUENCE application to version 6.4.4 using the upgrade file in *6.4.0.0 Installation/Setup Or Upgrade* and then upgrade to version 7.1 as detailed in Upgrading from SEQUENCE v6.4.4 or later above.

## New Features

### Administration Environment

The Administration Environment has been upgraded significantly, and now has a new look and feel, improved functionality and enhanced user-friendliness.

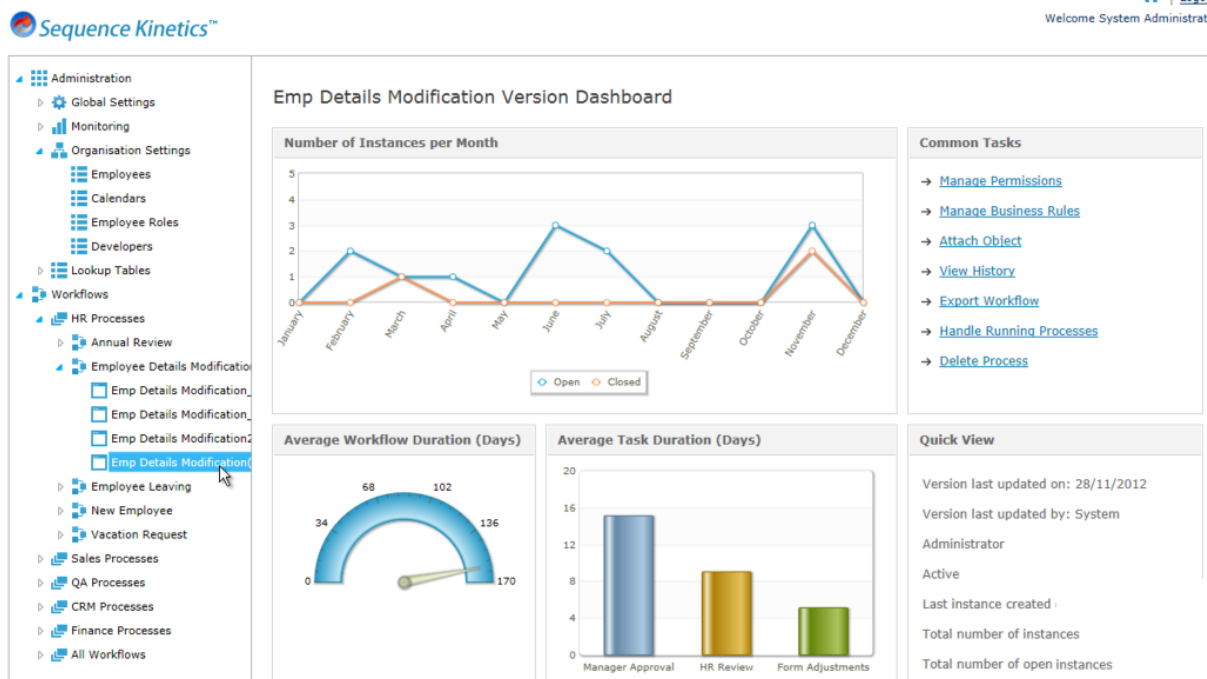


### New Administration Environment

Common Tasks are centred in the middle of the page, including such actions as Creating a New Workflow, Handling Running Processes, Defining a Chart, and Editing the Organisation.

Workflow Tables screens (accessed from the left tree), such as Edit Employee, Lookup Tables and Calendars have also been upgraded.

Administrators can create Workflow Categories and organise their workflows according to them. They can also view important workflow and workflow version KPI, status and common tasks, by clicking the Workflow or Workflow Version.



### Workflow Version Dashboard

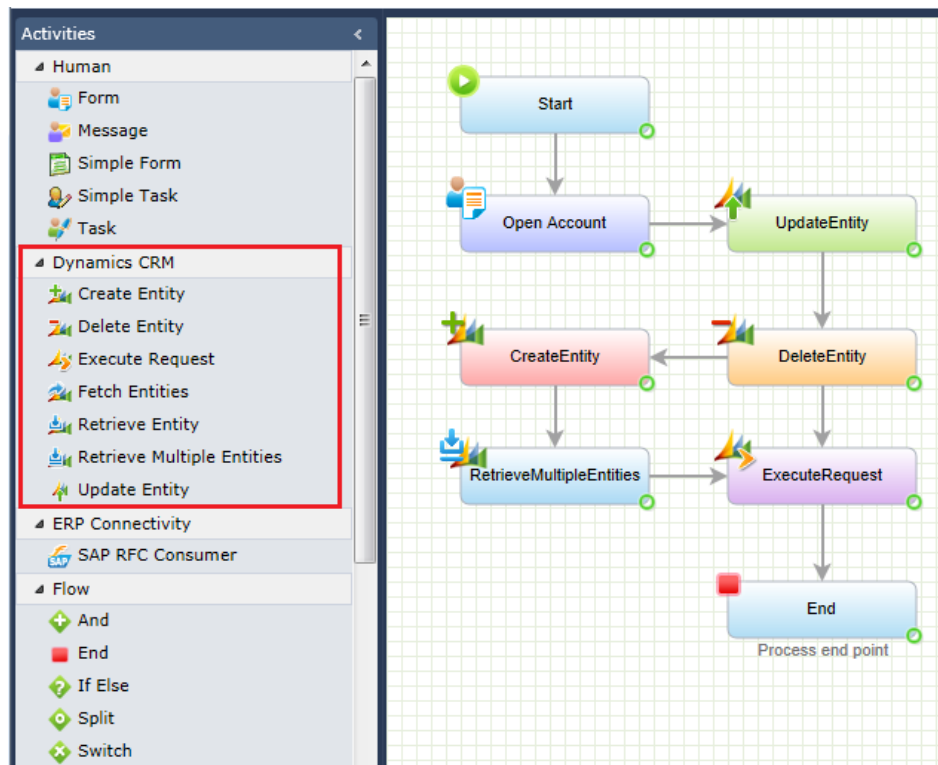
[Click here](#) to watch an orientation video for the new Administration Environment.

## Dynamics CRM Activities

This Release includes a set of out-of-the-box activities for integration with Microsoft Dynamics CRM. These activities enable you to create, retrieve and edit CRM entities, and execute CRM actions. This functionality makes it easy to create complex business processes for Dynamics CRM, and business processes which leverage CRM data.

The following activities have been added to the App Studio toolbox:

- **Create Entity:** create a new CRM entity (e.g. lead, account, contact)
- **Delete Entity:** delete a CRM entity
- **Execute Request:** execute any CRM action (e.g. assign owner)
- **Fetch Entity:** fetch the XML of a CRM entity
- **Retrieve Entity:** fetch a CRM entity as an object
- **Retrieve Multiple Entities:** fetch multiple CRM entities as objects
- **Update Entity:** edit a CRM entity



### Dynamics CRM Activities

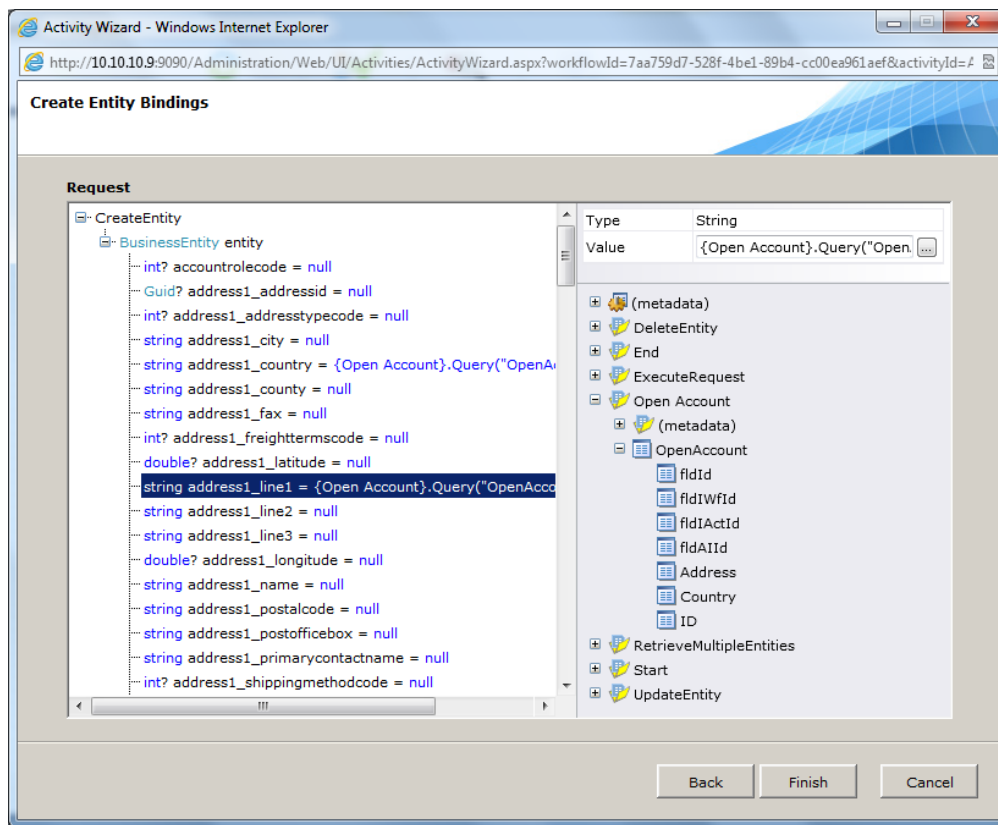
Each activity includes a step-by-step wizard which enables you to define the connection to a CRM instance, and then define how the process interacts with the CRM entity(ies) or action.

The screenshot shows the 'CRM Connection Details -- Webpage Dialog' window. The URL bar displays 'http://10.10.10.9:9090/Administration/Web/UI/Crm/CrmConnectionWizard.aspx?value=ef2c98fc'. The dialog is titled 'CRM Connection Details' and contains the following sections:

- CRM Server Information:**
  - Server Name: 10.10.10.9
  - Port: 5555
  - ☐ Use SSL
  - Credential Type: Store
  - Credential Name: [empty field]
  - Discover Organizations button
- Organizations:**
  - CRMQA (selected)
- Name:**
  - CRMQA

At the bottom, there are 'OK' and 'Cancel' buttons.

### Define CRM Connection Details



**Creating CRM Entity Using Data from the Workflow**

## Process<sup>TO GO</sup> Mobile Application

This licensed feature provides a quick and easy way to interact with Sequence applications using your Smartphone device.

Process<sup>TO GO</sup> is designed as an HTML5 application which can be browsed from any mobile device browser.

Process<sup>TO GO</sup> provides access to nearly all Flowtime (Runtime) functionality, enabling you to:

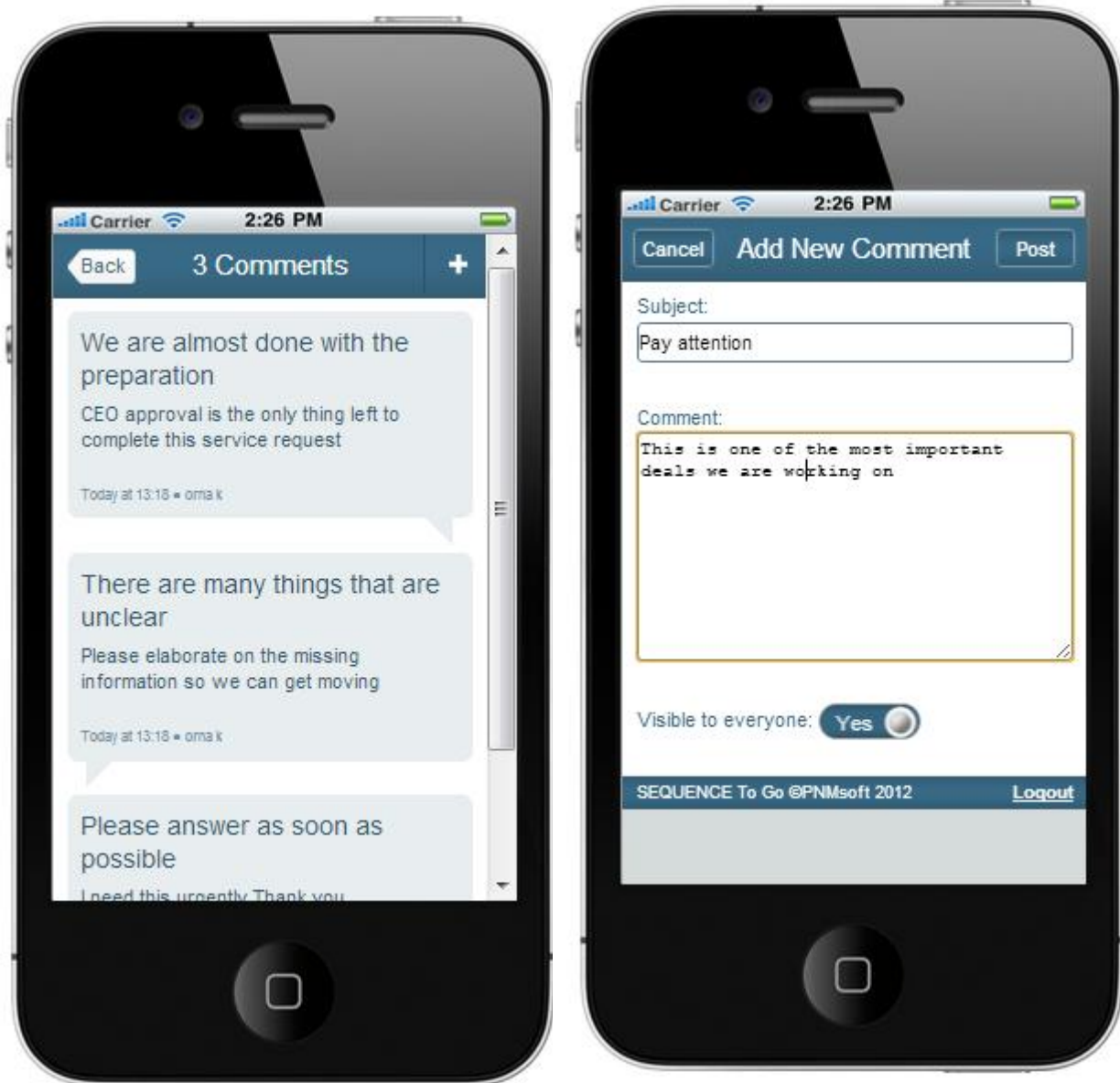
1. View your inbox items.
2. Action tasks.
3. Add Comments.
4. Kick off new processes.
5. View the status of current instances.
6. View built in charts.

***Note:** Process<sup>TO GO</sup> is best viewed on iPhone 4 or Android 2.3 and above.*





Process<sup>TO GO</sup> Homepage and Inbox



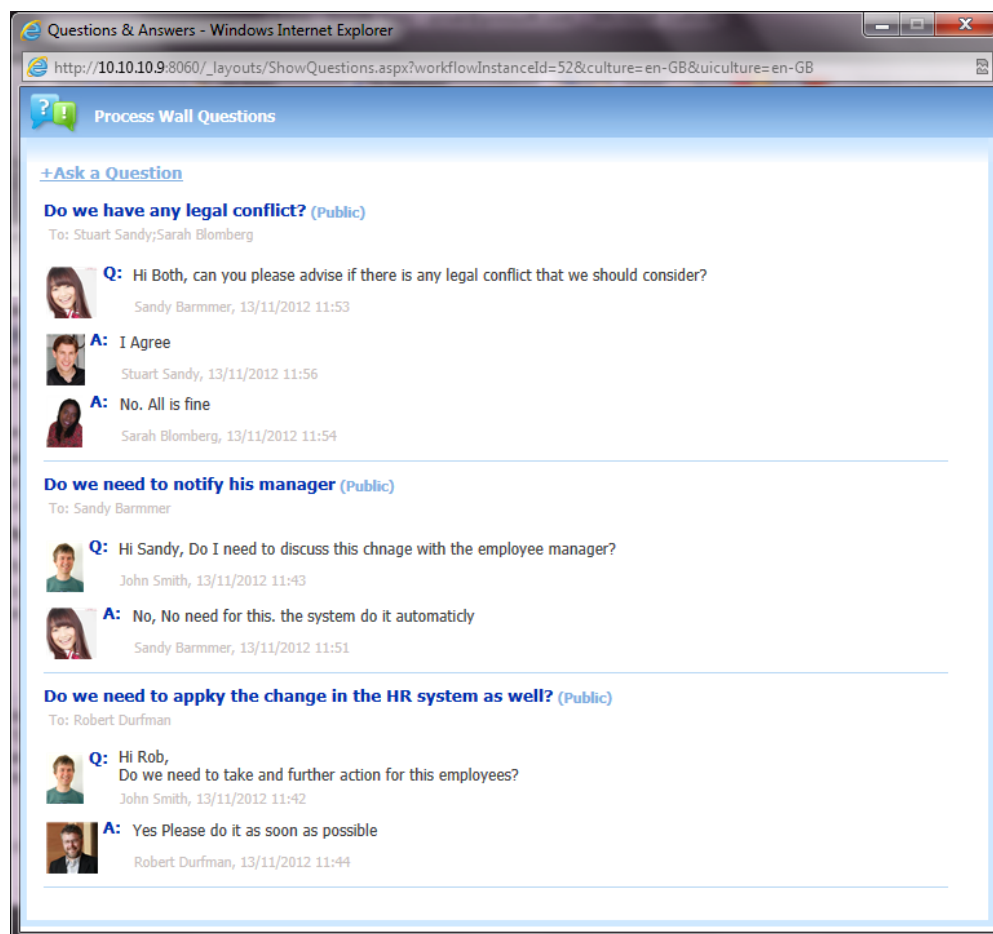
Process<sup>TO GO</sup> Viewing and Adding Comments

## User Photos

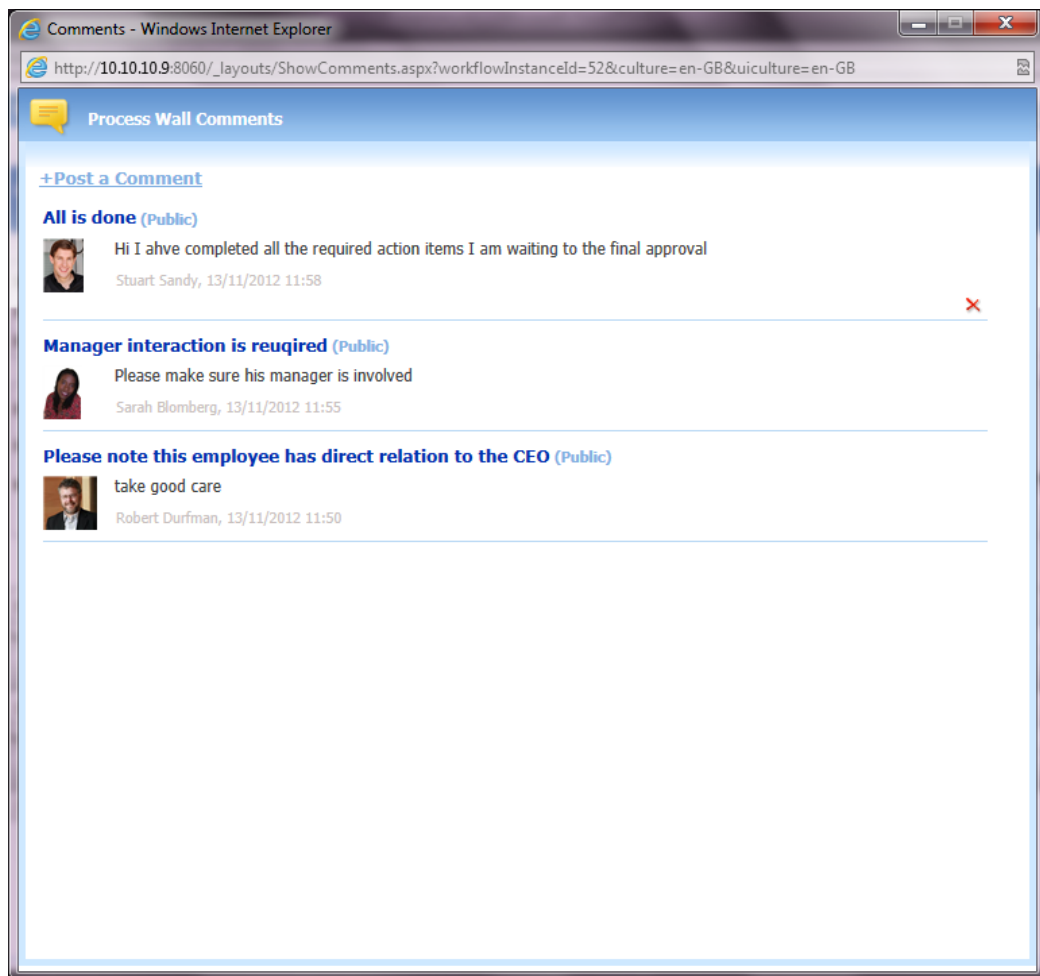
Sequence enables users to attach a photo to their profile. An administrator or power user with permissions to edit the employee table can attach a photo to any Sequence user.

Sequence can also import the photos from the Active Directory if this is used in the organisation.

The photos are then displayed on the Process Wall, alongside questions, answers and comments.



User Photos – Process Wall Questions



User Photos – Process Wall Comments

## Mail Sender Configuration Options

You now have the option to set the sender of the Message and Task activities.

In the *Properties* tab of the Message Wizard notice the new field: **Mail Sender**. You can select the following **Mail Sender** options:

1. **System Default** – Behave the same as previously. Mail will be sent from the email specified in the BRS config file. The message creator (the 'From' field in the email) is the user who updated the last activity.
2. **Activity Instance Creator** – Mail will be sent from the user who updated the last activity.
3. **Workflow Instance Creator** – Mail will be sent from the user who initiated the workflow. This user will be set as the message creator.
4. **Custom** – Enables you to define the expression whose result is user id. This user will be set as the message creator.

The screenshot shows a web browser window titled "Message Details - Windows Internet Explorer". The address bar shows a URL: `http://10.10.10.9:9090/administration/Web/UI/Messaging/MessageWizard.aspx?workflowId=097d488d-cf4b-4775-8897-9f300c0f3210&activityId:`. The page has a tabbed interface with "Message", "Recipients", "Properties", and "Attachments". The "Properties" tab is active. Under "Email Mode", a dropdown menu is set to "None". Below it, the "Sender Mode" dropdown is highlighted with a red rectangle and set to "System Default". Further down, there are fields for "Task Due Date" and "Time Interval" (set to "Day"). There are several checkboxes: "Set Due Date by Working Time", "Set Mail as High Priority" (with an "Only if (optional)" field), "Send Email with Custom Email Header", "Dynamic Message Editing" (with a description: "Check this box to enable editing of the message during runtime execution"), and "Calculate per Recipient". At the bottom are "Back", "Next", "OK", and "Cancel" buttons.

**Message Wizard – Message Properties Tab**

### Configuration of Other System Messages

You can configure mail sender options for other system messages in the BRS Config file, by editing the `senderMode` value:

```
<essaging>
  <messageTypes>
    <!-- workflow message -->
    <add id="00000000-0000-0000-0000-000000000000" senderMode="Predefined" />
    <!-- rollback message -->
    <add id="E993B9F3-3A3F-4DE6-B38B-A086A1729CA1" senderMode="Predefined" />
    <!-- answer message -->
    <add id="67244068-B77E-410D-B26D-E34A607514FD" senderMode="Predefined" />
    <!-- comment message -->
```

```
<add id="F883F524-2707-4959-8713-08B4D504B238" senderMode="Predefined" />

<!-- delegation message -->

<add id="100215E0-AB4C-4D11-BB7C-0FC313248895" senderMode="Predefined" />

<!-- question message -->

<add id="E966270A-8759-45CD-B222-3CAB5A7F0DB0" senderMode="Predefined" />

</messageTypes>

</messaging>
```

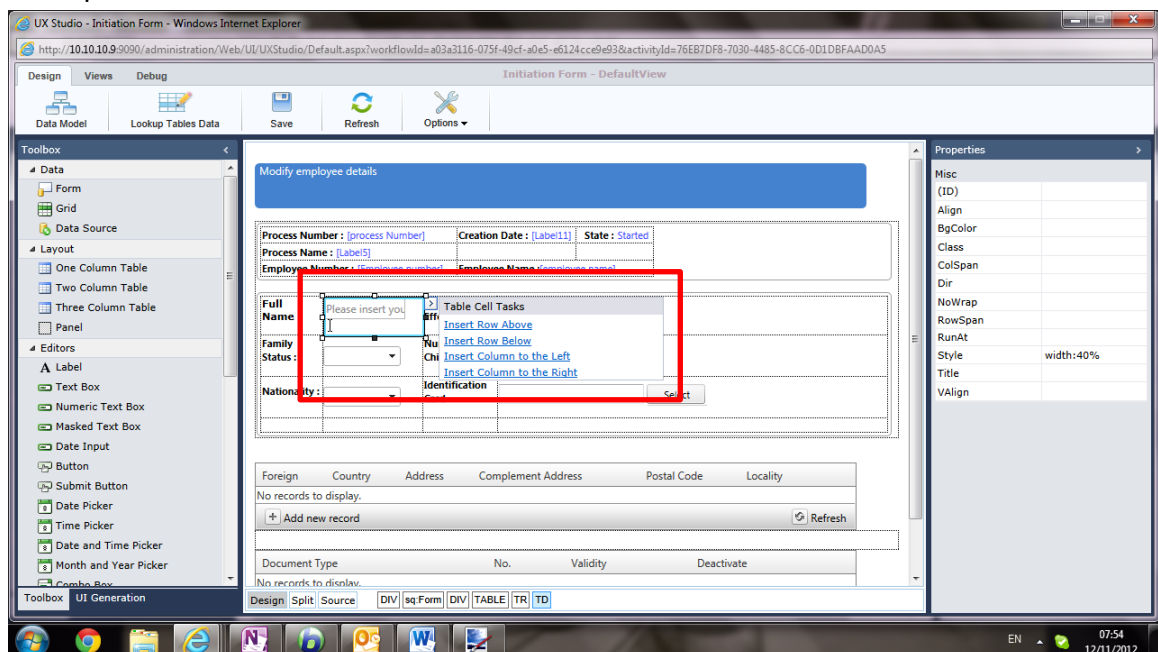
The senderMode can be set to one of the following options:

- **Predefined:** the system default email as defined in the BRS config file.
- **ActivityInstanceCreator:** the user who created the activity instance.
- **WorkflowInstanceCreator:** the user who created the workflow instance.
- **MessageSender:** the user who sent the message.

## Enhanced Features

### UX Studio

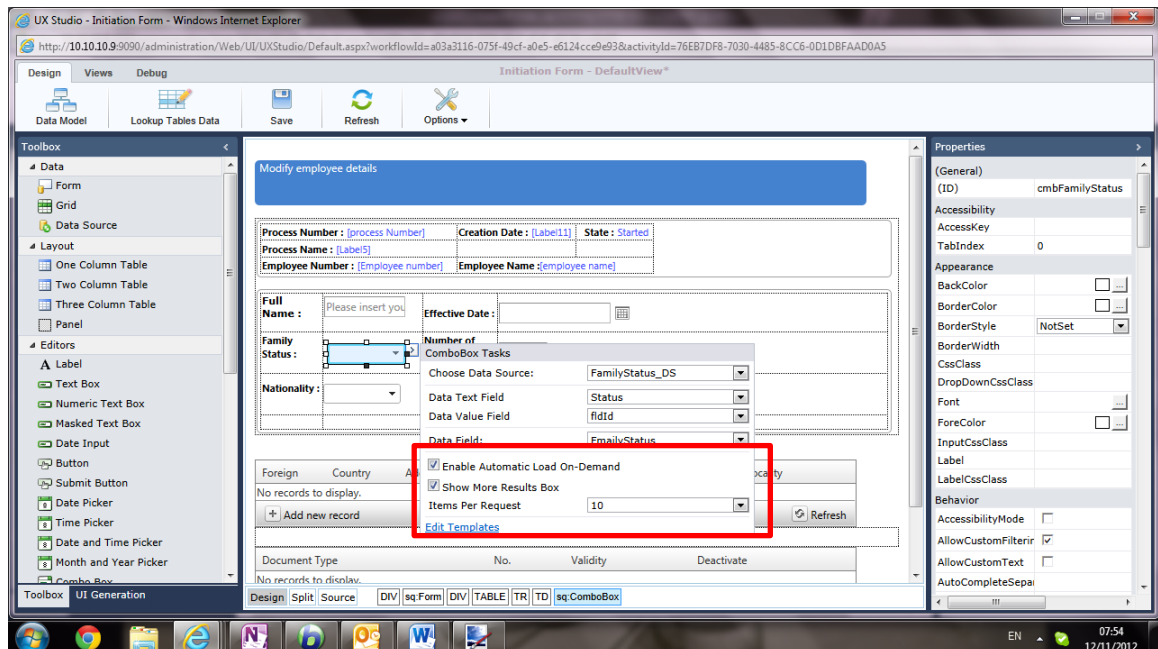
1. **Table editing smartpane** – A table editing smartpane makes Table editing much easier. To add a row or column, simply select the required action from the smartpane.



**Table Editing Smartpane**

## 2. Quickly convert Combos to load on demand –

To enhance the User experience when using a combo with many values (more than 50) or combos that are populated from a service or a Stored Procedure, it is recommended to use the ‘load on demand’ option. You can now set this property quickly from the combo smart pane.



### Combo Smartpane

When checking the ‘load on demand’ option, the combo-box loads its Items when the user opens the combo’s dropdown for the first time, and when the user types any text in the combo’s input field.

***Note:** The `AllowCustomText` property is enabled (set to true) by default when the `Load On Demand` option is enabled, and the value set to the property is ignored.*

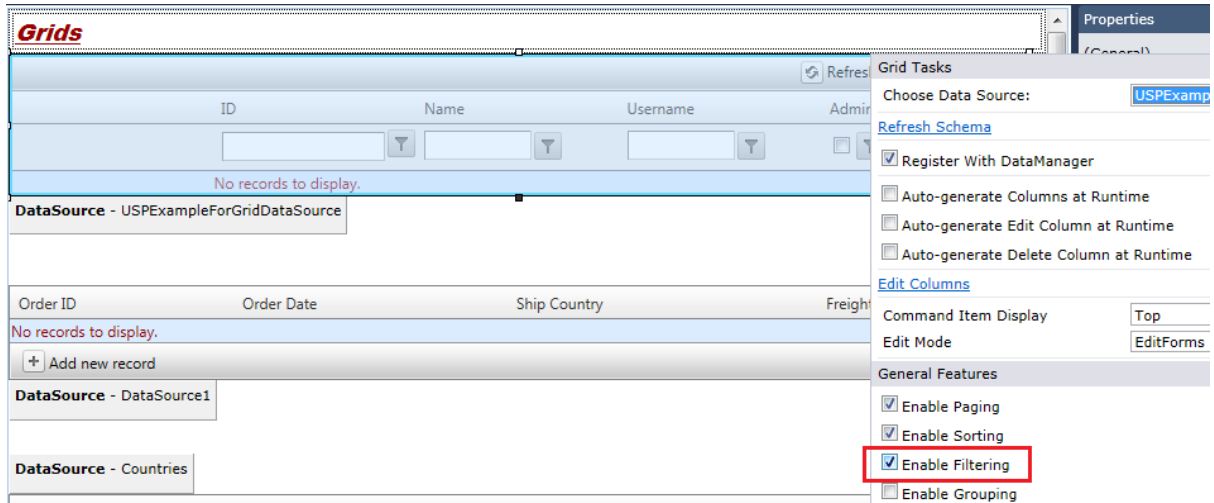
The combo smartpane now includes the following options:

- **Enable Automatic Load On-Demand** – enable the load on demand behavior for the combo.
- **Show More Result Box** – Display how many items exist and give the user the option to move to the next quota.
- **Item Per Request** – how many items will be displayed on each page of the dropdown.



### 3. Quickly Filtering Grids

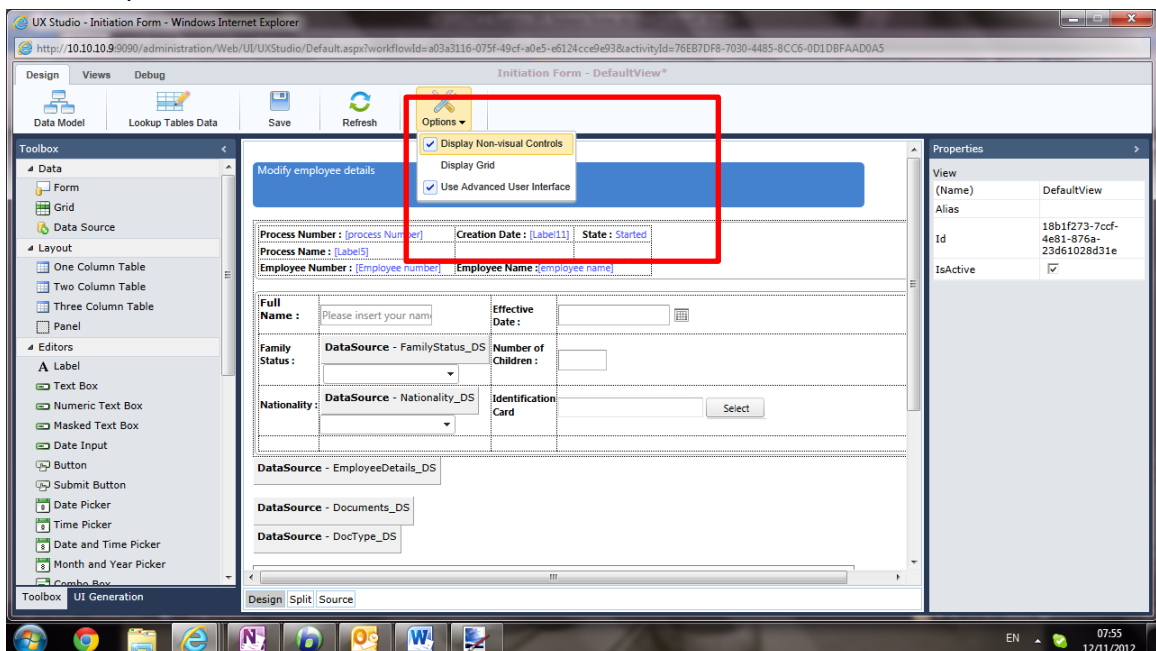
You can enable users to quickly filter grids by column. To do so, select the Enable Filtering checkbox in the Grid Control smartpane.



#### Enable Filtering for Grids

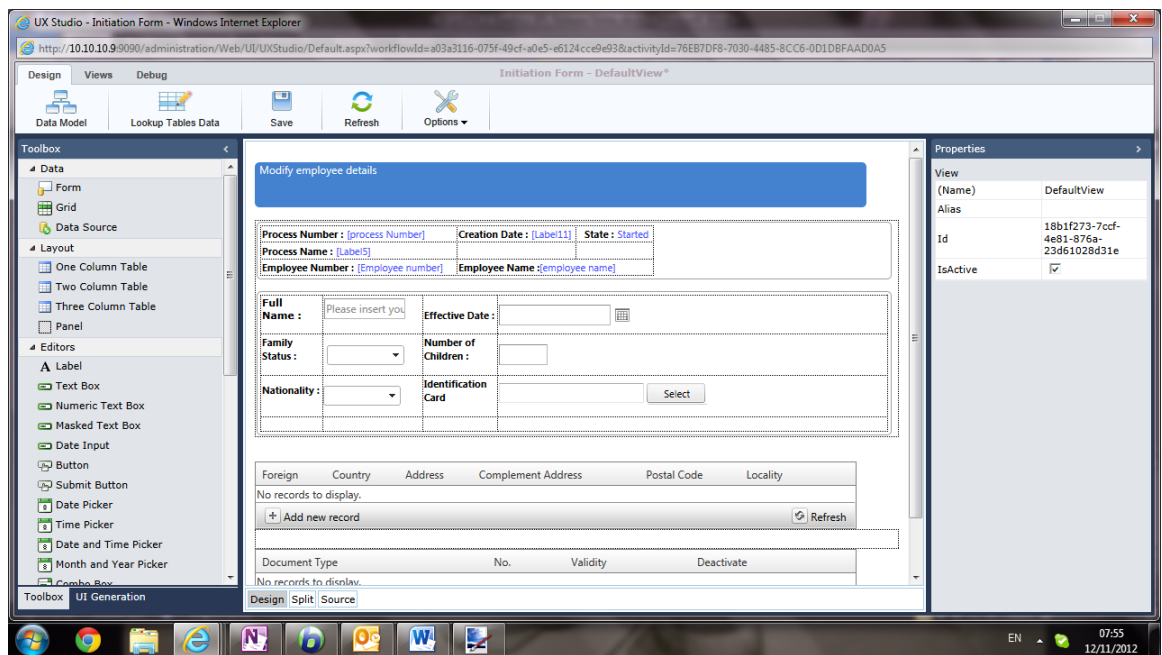
### 4. Ability to Hide Data Bound controls

If you wish to see a clear view of your form without the DataSource controls and any other non-visual controls, you can now hide these elements using the *Options* menu on the top ribbon of the UX Studio.



#### Options – Hide/Display Non-Visual Controls

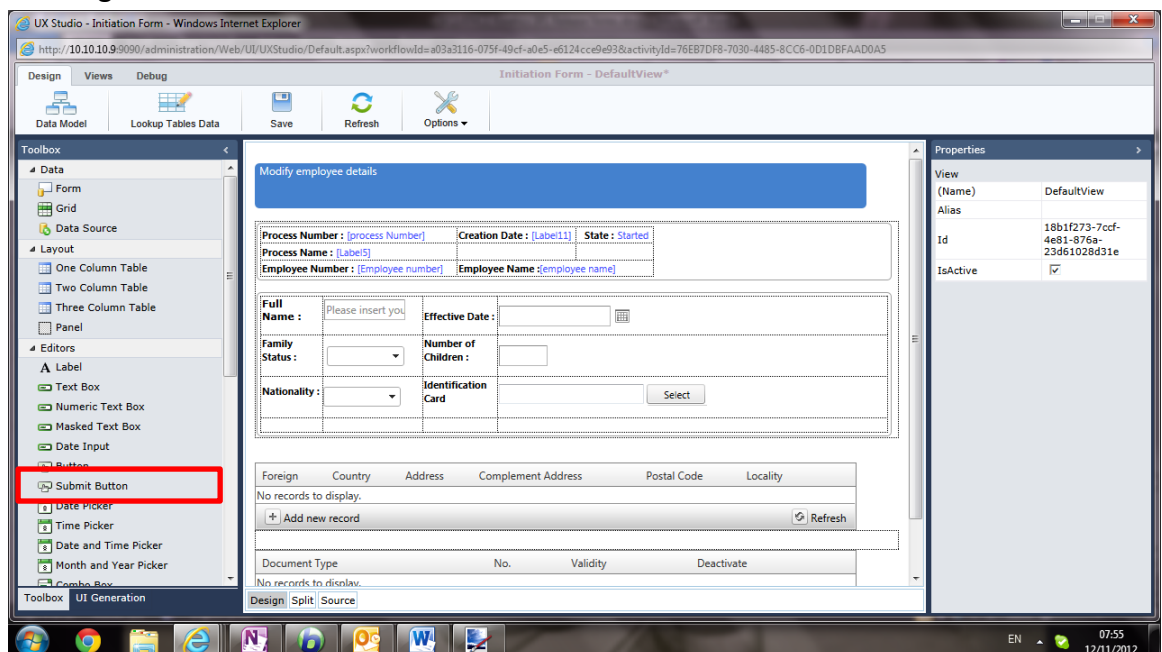




### UX Studio with Non-Visual Controls Hidden

#### 5. Save button control

There is a new **Submit** button control in the UX Studio Toolbox. This control is a button with the Save command option already configured, enabling quicker form building.



### Submit Button

6. Grid paging was set to true by default.
7. Support for IE 8 – form markup can be edited using IE8.

## 8. Expression Parameter

An ExpressionParameter class was added that can be used as a parameter for a DataSource web control:

```
<sq:DataSource runat="server">

  <WhereParameters>

    <sq:ExpressionParameter Name="p1" Expression="{Form1}.ActivityInstanceId" />

  </WhereParameters>

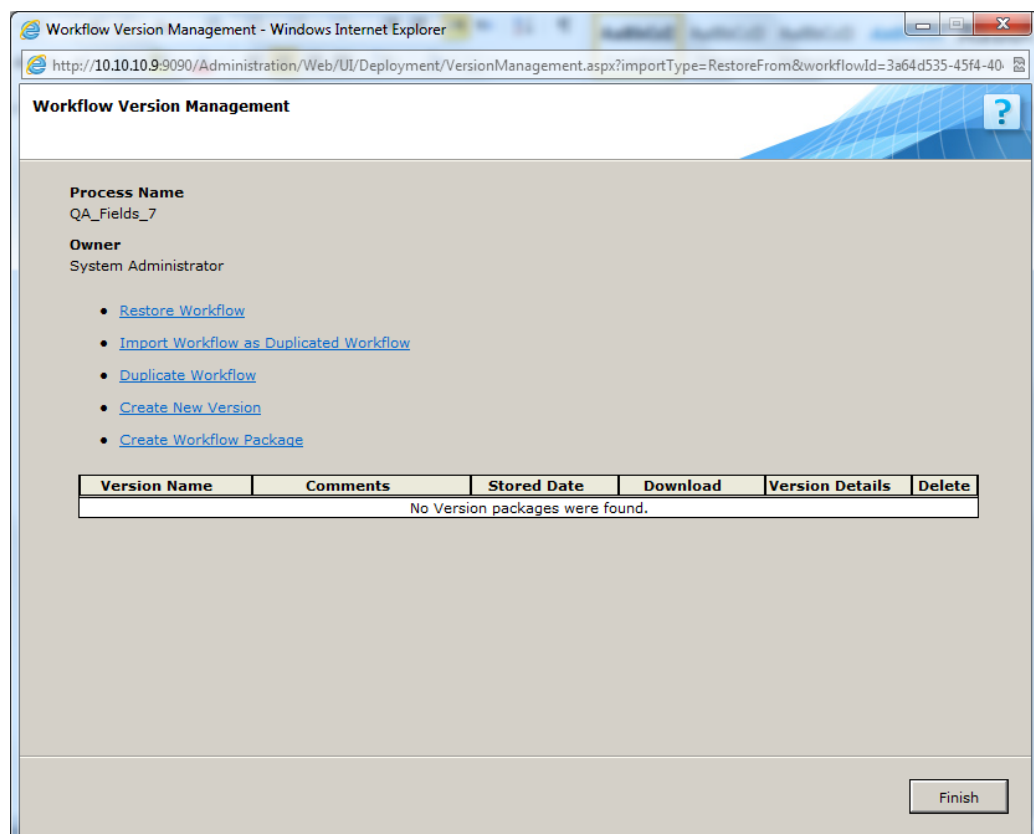
</sq:DataSource>
```

## Version Management

The Version Management screen now includes enhanced options for duplicating workflows and workflow versions, giving you better control over deployment and versioning.

The following new options are available:

- **Duplicate Workflow:** duplicate the workflow and create a new copy in a new workflow space.
- **Create New Version:** create a new version of the workflow in the same workflow space.



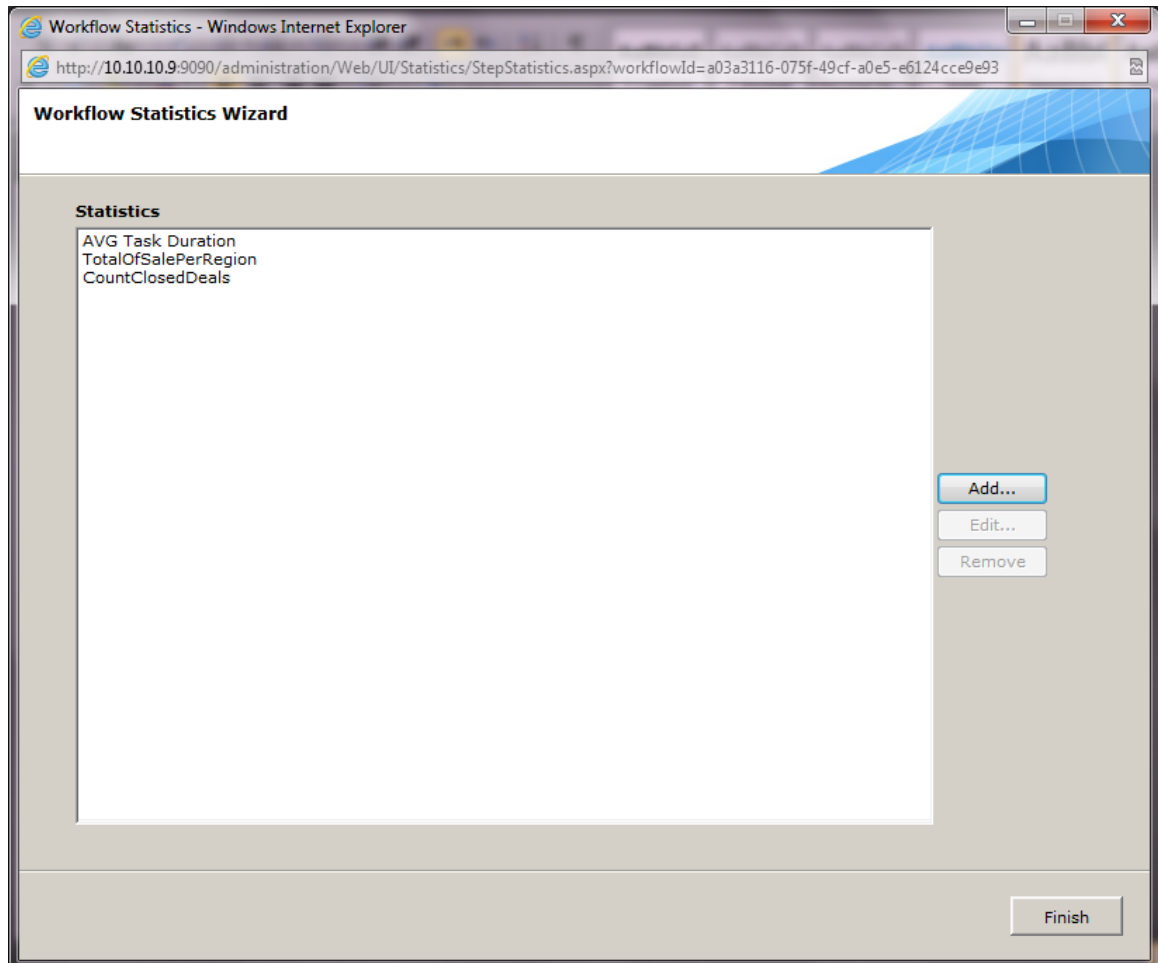
**Workflow Version Management Screen**

## Active Directory Synchronization Service

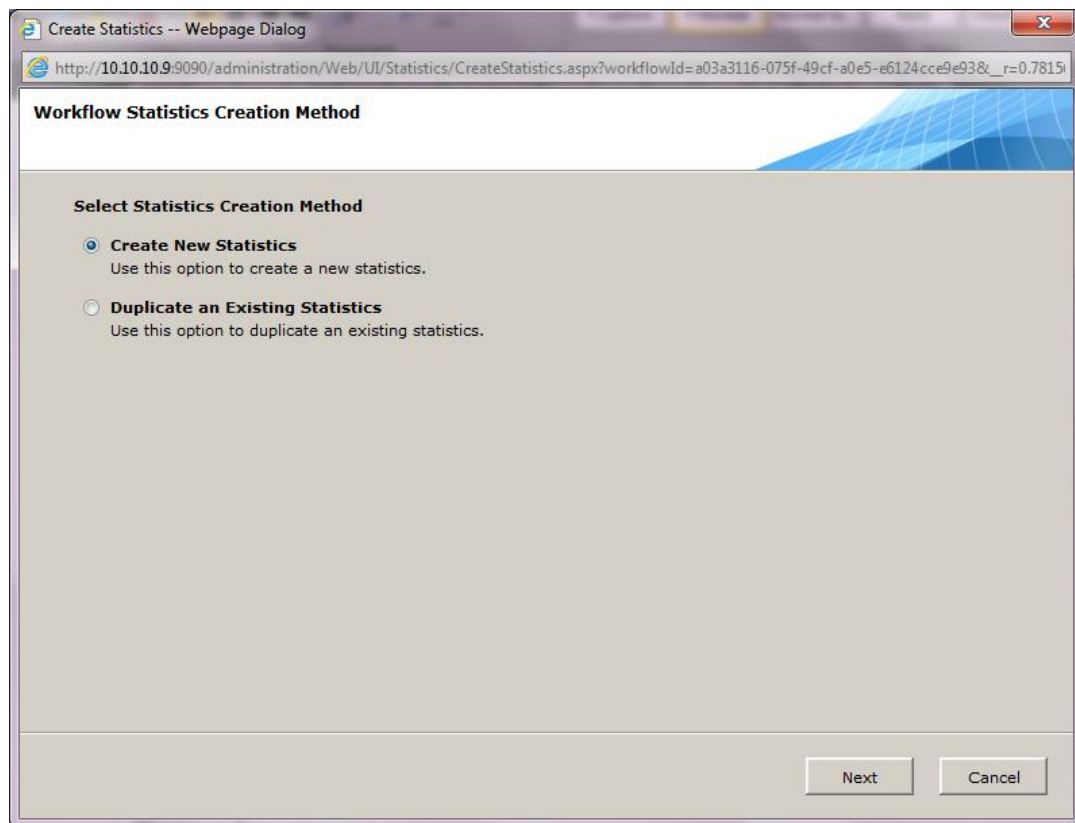
The limitation of 1500 user per group in the Active Directory has been removed.  
Synchronization faults were solved in cases of massive volume of users and groups.

## Sequence Analytics

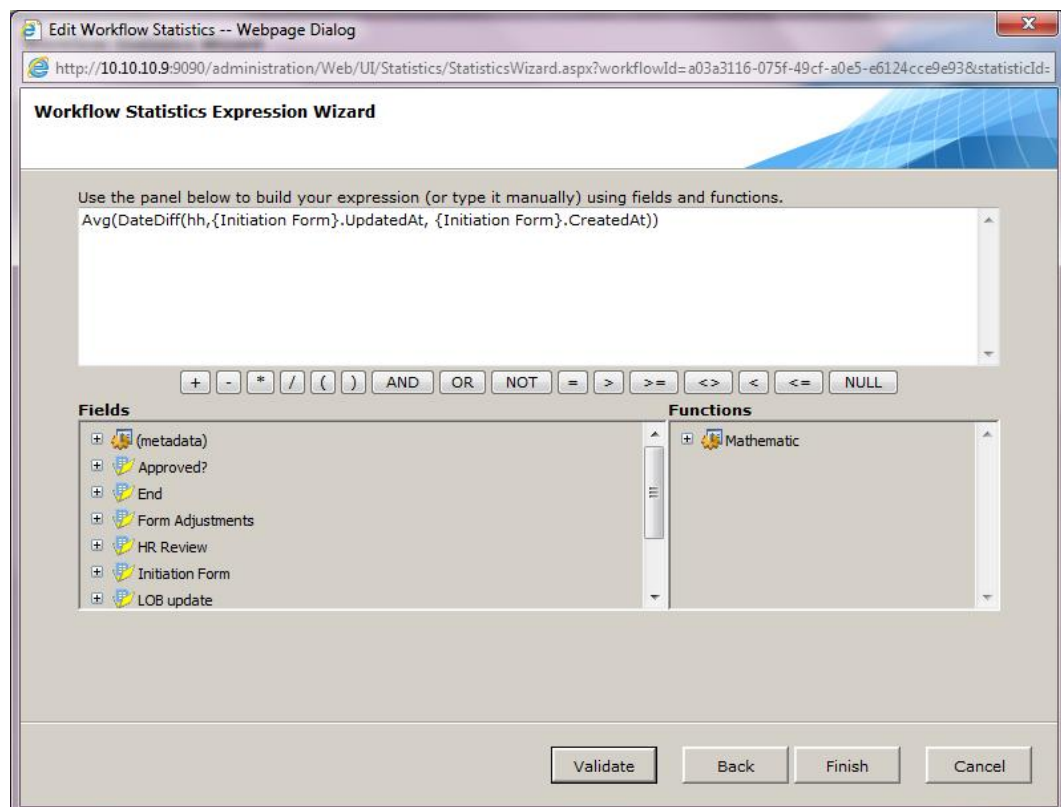
The Statistics Wizard has been improved, and support to the new form data model expression has been added.



**Workflow Statistics Wizard**



### Statistics Wizard – Creation Method

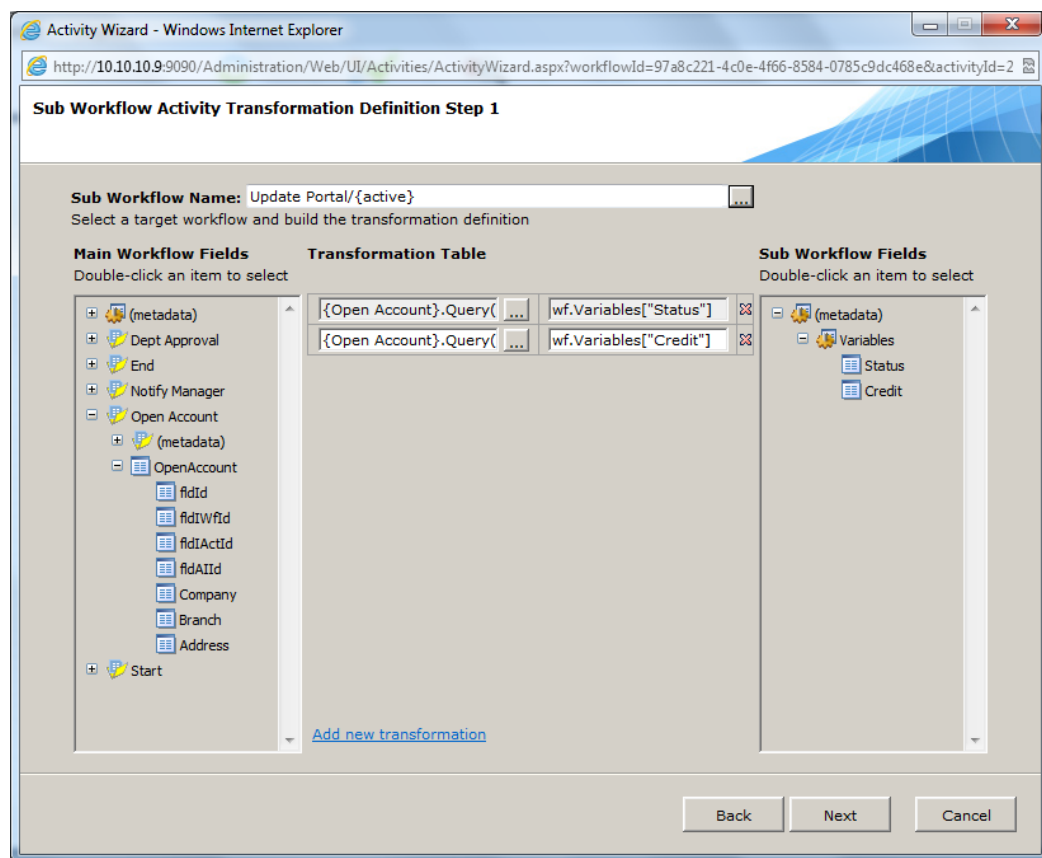


### Statistics Wizard – Expression Wizard

## Sub Workflow Selection and Variable Mapping

The Sub Workflow wizard includes an enhanced selection of the Sub Workflow. The wizard enables you to select which version of the Sub Workflow you wish to use.

In addition, you can now define transformation of variables between a Workflow and a Sub Workflow and from the Sub Workflow back to its parent Workflow. The Sub Workflow Activity wizard enables you to select and map variables to workflow data and to other variables. If Sub Workflow input variables are mapped, then they are assigned their values upon the Start of the Sub Workflow.



### Sub Workflow Mapping Variables

**Note:** The *SubWorkflowActivityArgument.TargetField* property type was changed from *ActivityInstanceDataFieldReference* to *DataFieldReference*.

## Web Services

Web Services SOAP message tracing functionality was added:

```
<switches>
```

```
...
```

```
<add name="sequence.host.switch" value="All" />
```

```
<add name="XmlSerialization.Compilation" value="4"/>
```

```
<add name="sequence.dynamicRuntime.debugMode" value="False"/>

</switches>
```

## Expressions

You can now execute a SQL statement that returns a table: { sqlt: select \* from tbl }

## Authentication

There is a new web forms authentication provider that provides persisted sessions:

```
<add type="PNMsoft.Sequence.Security.WebFormsUsernameAuthenticationProvider,
PNMsoft.Sequence.Runtime, Version=7.0.0.0, Culture=neutral,
PublicKeyToken=0a1a1b90c1c5dca1"></add>
```

## Workflow Execution

You can now assign values to workflow parameters upon the start a workflow using the API.

## Web Config Modifications

The following modifications were made in web config files:

### All

Providers Element:

```
<add type="PNMsoft.Sequence.Data.Sql.SqlWorkflowStatisticsDataProvider,
PNMsoft.Sequence.Data, Version=7.0.0.0, Culture=neutral,
PublicKeyToken=0a1a1b90c1c5dca1"/>
```

### Flowtime

Web.server handlers element:

```
<add name="DisplayUserPicture" verb="GET, HEAD, POST"
path="DisplayUserPicture.axd"
type="PNMsoft.Sequence.Web.DisplayUserPictureHttpHandler,
PNMsoft.Sequence.Web, Version=7.0.0.0, Culture=neutral,
PublicKeyToken=0a1a1b90c1c5dca1" preCondition="integratedMode" />
```

### BRS

SectionGroup element:

```
<section name="messaging"
type="PNMsoft.Sequence.WindowsServices.BRS.Configuration.MessagingConfigura
tionSection, PNMsoft.Sequence.WindowsServices.BRS"/>
```

Sequence.engine element:

```
<messaging>
```

```
<messageTypes>

  <!-- workflow message -->

  <add id="00000000-0000-0000-0000-000000000000"
senderMode="Predefined" />

  <!-- rollback message -->

  <add id="E993B9F3-3A3F-4DE6-B38B-A086A1729CA1"
senderMode="Predefined" />

  <!-- answer message -->

  <add id="67244068-B77E-410D-B26D-E34A607514FD"
senderMode="Predefined" />

  <!-- comment message -->

  <add id="F883F524-2707-4959-8713-08B4D504B238"
senderMode="Predefined" />

  <!-- delegation message -->

  <add id="100215E0-AB4C-4D11-BB7C-0FC313248895"
senderMode="Predefined" />

  <!-- question message -->

  <add id="E966270A-8759-45CD-B222-3CAB5A7F0DB0"
senderMode="Predefined" />

</messageTypes>

</messaging>
```

## Resolved Issues

1. Deployment – Unable to deploy a process where the data model contains a view that is based on a UACT used by same process.
2. Data Model – Issues with mapping a nullable value returned from a Stored Procedure.
3. Data Model – Cross referenced models sometimes lead to an application crash.
4. Data Model – Queries from imported data models return data without filtering by the system keys.
5. Data Model – Secondary key is ignored when data is selected in the context of the task instance.
6. Data Model Design Environment – When defining a service query, properties of nullable types cannot be defined.
7. Message wizard – Problem using functions in Rich text Editor mode.
8. Source Control – Start and End does not appear in the activity list.
9. Flowtime View Status – Activity Name is not wrapped to fit the activity size.
10. Flowtime Grids – Global variables are not displayed for closed instances.

- 11. App Studio – Cannot uncheck the Q&A option.
- 12. UX Studio UI generation – Missing tag in mobile view generation.
- 13. Expressions – Scope method ({Activity}.Scope()) breaks an expression normalization process.
- 14. Expressions – try, tryelse functions are case sensitive.
- 15. Dynamic Infrastructure Design Environment (e.g. Web Services, WCF Service, etc.) – Non-writable complex type properties are displayed in the bindings wizard.
- 16. WCF Consumer – WCF Consumer ignores a Store/Application authentication type setting.

## Resolved Support Cases

The following Support Cases were addressed in this version:

#6824, #6657, #6590, #6492, #6326, #6101, #7194

## Addressed CRs

CR 4122 was addressed in this version.

## Known Issues

See known issues online at:

<http://members.pnmsoft.com/Downloads/Lists/Known%20Issues/AllItems.aspx>