SharePoint Repeating Rows Field Type

User Guide
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>General</td>
<td>5</td>
</tr>
<tr>
<td>Product Overview</td>
<td>6</td>
</tr>
<tr>
<td>Why did we build it?</td>
<td>8</td>
</tr>
<tr>
<td>Key Features</td>
<td>8</td>
</tr>
<tr>
<td>Installation Guide</td>
<td>9</td>
</tr>
<tr>
<td>Software Requirements</td>
<td>9</td>
</tr>
<tr>
<td>Server Requirements</td>
<td>9</td>
</tr>
<tr>
<td>Client Requirements</td>
<td>9</td>
</tr>
<tr>
<td>Installation Procedure</td>
<td>9</td>
</tr>
<tr>
<td>SharePoint 2007</td>
<td>9</td>
</tr>
<tr>
<td>SharePoint 2010/2013/2016</td>
<td>9</td>
</tr>
<tr>
<td>post Installation</td>
<td>11</td>
</tr>
<tr>
<td>SharePoint 2007</td>
<td>11</td>
</tr>
<tr>
<td>SharePoint 2010/2013/2016</td>
<td>11</td>
</tr>
<tr>
<td>Un-Installation Procedure</td>
<td>12</td>
</tr>
<tr>
<td>SharePoint 2007</td>
<td>12</td>
</tr>
<tr>
<td>SharePoint 2010/2013/2016</td>
<td>12</td>
</tr>
<tr>
<td>Administration Guide</td>
<td>13</td>
</tr>
<tr>
<td>Product Activation</td>
<td>13</td>
</tr>
<tr>
<td>SharePoint 2007</td>
<td>13</td>
</tr>
<tr>
<td>SharePoint 2010/2013/2016</td>
<td>14</td>
</tr>
<tr>
<td>Creating a new Repeating Rows column</td>
<td>18</td>
</tr>
</tbody>
</table>
Step 1: prepare your lists ........................................................................................................................................18
Step 2: Create the Repeating Rows column ........................................................................................................18
Step 3: Configure the Repeating Rows column ....................................................................................................19
Step 4: check your Repeating Rows column in run-time .......................................................................................24
Working with versioning .........................................................................................................................................26
Working with large details lists ............................................................................................................................27
integration with Other KWizcom products ............................................................................................................28
INTRODUCTION

GENERAL

This document provides all the information needed to install, evaluate and deploy this KWizCom product:

- Introduction
- Installation Guide
- Administrator Guide
- User Guide
- FAQ
PRODUCT OVERVIEW

SharePoint Repeating Rows Field Type is part of the Forms bundle.

Multi-row forms are now available in SharePoint!

The *SharePoint Repeating Rows field type* enables you to easily create multi-row forms (such as expense forms) by simply using SharePoint’s out-of-the-box list forms.

That’s right! No need for InfoPath or SharePoint Enterprise server! You can implement multi-row forms in any SharePoint edition, including SharePoint Foundation Server.

Viewing the details is especially easy, just hover over 'view details...' to see the details without having to open the item!
Orders

+ new item or edit this list

<table>
<thead>
<tr>
<th>All items</th>
<th></th>
<th>Find an item</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Title</th>
<th>Order details</th>
<th>Country</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order-1</td>
<td>View Details</td>
<td>Country-1</td>
<td>Cnt1-city-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Category</th>
<th>Product</th>
<th>Price $</th>
<th>Quantity</th>
<th>Approved?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/1/2016</td>
<td>Cat-1</td>
<td>Product-1</td>
<td>$30.00</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>2/2/2016</td>
<td>Cat-2</td>
<td>Product-7</td>
<td>$50.00</td>
<td>3</td>
<td>No</td>
</tr>
</tbody>
</table>

$80.00
WHY DID WE BUILD IT?

Multi-row forms are mostly needed by any company to run core logistic processes. Common forms such as: *Expense reports* and *Working hour reports* can only be implemented by using InfoPath and SharePoint Enterprise edition or by developing custom forms – both options require significant investment of time and money.

The purpose of the Repeating Rows field type is to enable SharePoint customers to leverage their investment in SharePoint, and to be able to use the out-of-the-box list forms, so that no additional development is required, and no additional learning curve is required.

KEY FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>A new column type that enables you to add/edit a list item along with multiple connected items from a remote list.</td>
</tr>
<tr>
<td>Connect between a “Master” list and “Details” list (such as “Expenses” and “Expense details”).</td>
</tr>
<tr>
<td>Connected lists can be located in different sites.</td>
</tr>
<tr>
<td>Configurable amount of empty rows in “New” form</td>
</tr>
<tr>
<td>Configurable skins</td>
</tr>
<tr>
<td>Configurable summary calculated fields</td>
</tr>
<tr>
<td>Reverse Lookup created in the &quot;Details&quot; list enabling navigating back to the Master item.</td>
</tr>
<tr>
<td>Support read-only &quot;live&quot; calculated fields* in New/Edit forms</td>
</tr>
<tr>
<td>(* Requires KWizCom Forms)</td>
</tr>
<tr>
<td>Cross-browser</td>
</tr>
<tr>
<td>Multi-lingual</td>
</tr>
</tbody>
</table>
INSTALLATION GUIDE

SOFTWARE REQUIREMENTS

SERVER REQUIREMENTS

- WSS 3.0 or SharePoint Server 2007 SP2
- SharePoint Server/Foundation 2010/2013/2016

CLIENT REQUIREMENTS

- Microsoft Internet Explorer 9.0+, Firefox (latest version), Google Chrome (latest version), Safari (Latest version).
- Windows 7+, Mac OS X V10.9

INSTALLATION PROCEDURE

SHAREPOINT 2007

1. Log in as SharePoint administrator account to your SharePoint front-end server.
2. Download the product’s latest evaluation version from KWizCom’s internet web site. This evaluation version is fully functional for 30 days. Further details about product activation can be found in the Administrator guide (next section).
3. Unzip the product’s zip file on your SharePoint server.
4. Double-click the .msi file in order to begin the web installation.
5. When the installation process is complete it will recycle all application pools automatically.

SHAREPOINT 2010/2013/2016

1. Log in as SharePoint administrator account to your SharePoint front-end server.
2. Browse the product’s page on KWizCom’s website and click the “Go” link under the “Install using our Web Installer” section.
   This will start the KWizCom web installer.
**Note:** The KWizCom Web Installer will automatically offer you to upgrade other existing KWizCom products on your farm, in case you have old versions installed. You can check which products you wish to update at this time.

3. In case you prefer just to download the relevant .wsp packages and manually deploy them, then in the web installer UI check the “Download only” option (3rd page in the installer’s wizard). When the installer finishes you will be able to go to the installer’s folder on your server, and install the KWizCom packages by simply running the ”SP-WSPIInstaller” powershell script.
POST INSTALLATION

SHAREPOINT 2007

1. After completing the installation, you will see a new KWizCom entry in Windows Start -> All Programs -> KWizCom -> KWizCom SharePoint Repeating Rows Field Type

SHAREPOINT 2010/2013/2016

1. After completing the package installation and deployment new “Repeating Rows” column type will be available when you add a new list column.
UN-INSTALLATION PROCEDURE

SHAREPOINT 2007

1. Log in as local admin to your SharePoint front-end server.
2. Go to Control Panel and double-click Add or Remove Programs.
3. Select SharePoint Discussion Boards entry and click Remove button.
4. Click Yes to approve the removal of the component.
5. Once the product was un-installed, close the Add or Remove Programs screen.

SHAREPOINT 2010/2013/2016

1. Retract the solution using SharePoint central admin or by using stsadm/powershell command line.
ADMINISTRATION GUIDE

This section describes all administration activities related to KWizCom Repeating Rows field type, including: product localization, product configuration and customization.

PRODUCT ACTIVATION

KWizCom products are available for evaluation prior to purchase.

This way you can try our components and verify that they indeed meet your needs. Each evaluation version contains all features of the component's production version. The only difference between the versions is that the evaluation version is time-limited and will operate for a period of one month.

Once you decide to purchase a KWizCom component you will need to order and then to activate the product. The steps that need to be taken next are listed below.

SHAREPOINT 2007

1. Order the product on the KWizCom website – www.KWizCom.com, or contact our sales team at sales@kwizcom.com.

2. After the order was made, activate your installed evaluation version through the Product Activation Request page on KWizCom’s web site: http://www.kwizcom.com/ProductReg. You will have to copy your Product Code (you will see the product code on the "About" product page):
3. Get the component activation key – this key will be sent to you by email once your order is processed.

4. Activate your installed evaluation version -
   click **Start -> All Programs -> KWizCom -> KWizCom SharePoint Repeating Rows -> Activate SharePoint Repeating Rows field type.**

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**SHAREPOINT 2010/2013/2016**

1. Order the product on the KWizCom website – [www.KWizCom.com](http://www.KWizCom.com), or contact our sales team at [sales@kwizcom.com](mailto:sales@kwizcom.com).

2. After the order was made, you can activate your installed evaluation version. Activation is done by the following steps:
   a. Open SharePoint Central Admin. On the main “Central Administration” page, you will see the “KWizCom Features Administration” icon:

   ![Central Administration](image)

   - Click the **KWizCom Features Administration** icon. You will be redirected to a page that allows you to manage all your installed KWizCom products’ licenses:
c. Click the “Manage License” link next to the product that you wish to activate. You will be redirected to that product’s license management page:

<table>
<thead>
<tr>
<th>Product Information</th>
<th>SharePoint File Controller Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
</tr>
<tr>
<td>Version:</td>
<td>11.0.00</td>
</tr>
</tbody>
</table>

**Farm License**

Farm license applies to all site collections in your farm.

**Product Code:** Not requested. [Request product code and start your evaluation license now](#).

**Web Application or Site Collection License Management**

If you have a license for one web application or site collection, you can enter it here. Simply choose the site collection you wish to activate the license on from the picker and enter the License key:

**Web Application License**

Web application license applies to all site collections under the same URL, for example: http://sharepoint, http://sharepoint/sites/sales etc...

**Product Code:** Not requested. [Request product code and start your evaluation license now](#).

**Site Collection License**

Site collection license applies only to one specific site and its sub-sites.

**Product Code:** Not requested. [Request product code and start your evaluation license now](#).

d. Click on the “Request product code and start your evaluation now” link.

A product code will be generated and displayed as in the following screenshot:
e. Copy the product code.

f. Browse the **Product Activation Request page** on KWizCom’s web site: [http://www.kwizcom.com/ProductReg](http://www.kwizcom.com/ProductReg).

Copy your *Product Code* into the “Product Code” field, and after you fill-out all other form fields, click “Send Activation Request button.”
g. Once your order is confirmed, you will receive the Activation Code for your product by email.

h. Copy the activation code into the “Activation Code” field in the product’s license management page and click “Activate now!” link.

<table>
<thead>
<tr>
<th>Product Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong> SharePoint File Controller Feature</td>
</tr>
<tr>
<td><strong>Version:</strong> 11.0.03</td>
</tr>
</tbody>
</table>

**Farm License**
- Farm license applies to all site collections in your farm.

| Product Code: | THYVU71DQ7QCMVS VEYU01MMSVQ-CMS705YLV5YVYeV - SVQMUMIPSMVYXZ |
| Activation Code: | Copy to clipboard |
| License Notifications: |  |
| License Type: | Evaluation |
| Expiration: | Thursday, November 29, 2016 |

Web application or site collection license management
- Optionally, enter your email address to get notified when your license is exceeded or about to expire. To enter more than one email address, separate each email address with a comma.

Web Application License
- Web application license applies to all site collections under the same URL, for example, http://sharepoint, http://sharepoint/sites/sales etc...

| Product Code: | Not requested Request product code and start your evaluation license now! |

Site Collection License
- Site collection license applies only to one specific site and its sub sites.

That’s it! Your product is now fully activated.
CREATING A NEW REPEATING ROWS COLUMN

The Repeating Rows is a new type of column that allows you to edit a list item along with multiple rows of connected items.

In this section we’ll use the Expense Report example to explain how to configure the column.

STEP 1: PREPARE YOUR LISTS

Before you create a Repeating Rows column, you need to have your connected lists – a “Master” list and a “Details” connected list.

In our example, we have the following 2 lists:

- **Expense Reports list** – This is the “Master” list. Each item in this list is an expense report item, made by some employee.
  - The list includes the following columns:
    - Title
    - Employee (Person field type)
    - Reported month (Choice field)

- **Expense Details list** – This is the “Details” list. For each Expense item in the Expense Reports list, we have here multiple Expense Details items.
  - The list includes the following columns:
    - Date
    - Amount($)
    - Expense type
    - Expense details

STEP 2: CREATE THE REPEATING ROWS COLUMN

In the “Master” list, create a Repeating Rows column that will display multiple rows from the “Details” list.

In our example, we’ll create a Repeating Rows column called “Expense Details” in the Expense Reports list.
STEP 3: CONFIGURE THE REPEATING ROWS COLUMN

After choosing the “Repeating Rows” column type, you need to configure the following field properties:

Source List
Use this section to select the list used as the source for the Repeating Row field (the “Details” list):

1. Type the url where the “Details” list is located and click the "Load site" button.
2. Select the list from the “List Name” drop-down.
3. Select columns in the “Available columns” list that you want to be displayed by the Repeating Rows field.
4. For each displayed column, you can configure the following settings:
   a. Header – the table header displayed above this column (by default it will be the column caption)
   b. Width in edit mode – field’s width in pixels in the Edit Item form.
   c. Width in display mode – field’s width in pixels in the View Item form.
5. For numeric fields configure summary fields that you want to display below the Repeating Rows field.

In our example we’ve configured the field to display the “expense details” list fields, and created a summary field that will sum up all expense details amounts into total amount for the report:
Reverse Lookup

When creating the Repeating Rows column, a reverse lookup field is created in the connected “Details” list. This lookup field enables users to navigate from a details item, back to its connected item in the “Master” list.

In our “Expense Report” example:
We configured the reverse lookup to connect to the Expense Report’s title, we can also add more column from the expense report list that will appear in the Expense Details list views.
Layout

Use this section to define the visual appearance of this field to end-users:

- Sort repeating rows in view mode by field – this property allows you to select a “Details” list column by which the data displayed in the repeating rows field will be sorted.
- Default amount of displayed rows – define how many empty rows will be displayed in the “New Item” form.
- Allow users to add rows – check this property to allow end-users to add additional rows in the “New Item” and the “Edit Item” forms.
- Enable viewing rows in SharePoint View item page – check this property to display a per-row “View” icon, enabling users to view a Repeating Rows item in the native SharePoint View Item page (useful when the Repeating Rows field displays many columns so there’s a horizontal scroll in the page)
- Enable editing rows in SharePoint Edit item page – check this property to display a per-row “Edit” icon, enabling users to edit a Repeating Rows item in the native SharePoint Edit Item page (useful when the Repeating Rows field displays many columns so there’s a horizontal scroll in the page)
- Repeating Rows CSS file path – you can override the Repeating Rows used styles with your own custom styles. If you have a custom stylesheet file, save it in your SharePoint server and provide the full path to the file.
- Repeating Rows .ascx template file – You can also override the user control to perform more advanced customizations.
This section displays a preview of how the column will look like in run-time.

Once you complete configuring the column click “OK” to save your settings.
STEP 4: CHECK YOUR REPEATING ROWS COLUMN IN RUN-TIME

After you’ve created the Repeating Rows column it is time to check your configuration by simply creating a new item in your “Master” list.

In our example, we’ll create a new Expense Report item:

![Image of repeating rows column configuration](image)

**REMARK**

Summary fields are calculated once the user clicks the “Update totals” link below the repeating rows section.

So, now you can create/edit a report that includes the expense report properties, followed by multiple expense details rows:
Once you click the “Save” button the Expense Report item will be saved, along with the expense details rows that will be saved in the “Details” list (Expense Details list in our example).

**REMARK**
Upon clicking Save, empty rows will automatically be removed before the form data is saved. Empty rows, are rows in which all the fields are empty/no value selected and have no default values.
**WORKING WITH VERSIONING**

If you're using versioning on your list and worry about updates to the repeating rows field not being documented you don't have to worry, the repeating rows field now supports versioning:

<table>
<thead>
<tr>
<th>No.</th>
<th>Modified</th>
<th>Modified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>1/22/2014 7:42 AM</td>
<td>Administrator</td>
</tr>
</tbody>
</table>

### Expenses

<table>
<thead>
<tr>
<th>Expense date</th>
<th>Amount</th>
<th>Expense type</th>
<th>Expense Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/2014</td>
<td>$65.00</td>
<td>Travel</td>
<td>SharePoint Conference</td>
</tr>
<tr>
<td>1/2/2014</td>
<td>$33.00</td>
<td>Food</td>
<td>Business lunch</td>
</tr>
<tr>
<td>1/3/2014</td>
<td>$14.00</td>
<td>Drive</td>
<td>Taxi to the airport</td>
</tr>
<tr>
<td>1/6/2014</td>
<td>$25.00</td>
<td>Drive</td>
<td>Taxi to customer offices</td>
</tr>
</tbody>
</table>

---

| 1.0 | 1/22/2014 6:05 AM | Administrator |

### Title

Monthly expense report

### Month

01

### Employee

**sales1**

<table>
<thead>
<tr>
<th>Expense date</th>
<th>Amount</th>
<th>Expense type</th>
<th>Expense Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/2014</td>
<td>$65.00</td>
<td>Travel</td>
<td>SharePoint Conference</td>
</tr>
<tr>
<td>1/2/2014</td>
<td>$33.00</td>
<td>Food</td>
<td>Business lunch</td>
</tr>
<tr>
<td>1/3/2014</td>
<td>$14.00</td>
<td>Drive</td>
<td>Taxi</td>
</tr>
</tbody>
</table>

---

Total: $137.00

Total: $112.00
WORKING WITH LARGE DETAILS LISTS

In case the details list you are using is a large list, make sure Repeating Rows field works as expected by going to the details list settings-> Indexed Columns and add GUID_Source field to indices.

![Expense reports › List Settings › Indexed Columns › Edit index](image)

Use this page to create a new index, or delete an existing one. Certain indices are created by the system and cannot be deleted.

**Primary Column**
Select the primary column for this index.

**Secondary Column**
Select the secondary column for this index. If this is left blank, then this index will be a single column index on the selected Primary column. If a secondary index is specified, then this index becomes a compound index. Only certain field types can participate in compound indices.

Primary column for this index:

GUID_Master

Secondary column for this index:

(none)
INTEGRATION WITH OTHER KWIZCOM PRODUCTS

Repeating Rows field type support integration with the following KWizCom products:

- **Cascading lookup field type** of drop down type (note that left right list boxes and grid types are not supported), master behavior is enforced:

![Cascading Lookup Example](image)

**IMPORTANT RECOMMENDATION:**
Using Cascading Lookup with master-detail configuration produces additional AJAX requests to the ones already created by the Repeating Rows column. It is highly recommended not to create more than 2 levels of master-detail in the Cascading Lookup field while it is included in the Repeating Rows column.

- **KWizCom Forms** rules that are applied to the details list (for example field level permissions, constrains, default values) are enforced in repeating rows:
As you can see in the screenshot above, the “Comments” field shows “Locked for reading”. That is because it was configured to be hidden, using KWizCom Forms.

Another example of KWizCom Forms usage in Repeating Rows is the implementation of read-only, calculated fields:
The “Total Price” field in the Repeating Rows is disabled, and holds a calculated value of Price$ X Quantity.
This is implemented using KWizCom Forms dynamic default values, and the Repeating Rows refreshes the calculated field’s value when clicking the “Reload” icon.

- **File Upload field type** enables file upload into each of the detailed items that are displayed in the Repeating Rows.