AvePoint Record Rollback 3.1.2 for Microsoft Dynamics® CRM

User Guide

Revision E

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Overview

AvePoint Record Rollback for Microsoft Dynamics CRM implements audit record management mainly through three functions: **Record Rollback**, **Recycle Bin**, and **Version History**. AvePoint Record Rollback enables users to manage the audit records of entities, search the audit records of a specific entity, view all of the historical audit records of an entity, and roll back a specific record to restore the entity's previous values.

AvePoint Record Rollback for Microsoft Dynamics CRM supports Microsoft Dynamics CRM 2013 and Microsoft Dynamics CRM 2011.

Before You Begin

To use AvePoint Record Rollback for Microsoft Dynamics CRM:

- If you have the security role of **AvePoint Record Rollback Admin Account**, ensure that the Record Rollback solution has been imported into Microsoft Dynamics CRM, privileges has been set for security roles, and a license has been successfully applied.
- If you have the security role of **AvePoint Record Rollback User Account**, please contact your administrator to make the product available for use.

For detailed information about how to import the Record Rollback solution, set privileges for security roles, and apply a license, refer to the AvePoint Record Rollback for Microsoft Dynamics CRM Installation and Configuration Guide.

***Note**: The Record Rollback section in this guide is only available for users who have the security role of **AvePoint Record Rollback Admin Account**. If you have the security role of **AvePoint Record Rollback User Account**, go to the Recycle Bin or Version History sections directly.

Record Rollback

Users who have the security role of **AvePoint Record Rollback Admin Account** can use Record Rollback to manage audit records of entities that have had the **Delete** and **Update** operations performed upon them by users.

Getting Started

Navigate to **Settings** > **Customization** > **Record Rollback** to enter the Record Rollback interface.

The following screenshot shows the Record Rollback interface.

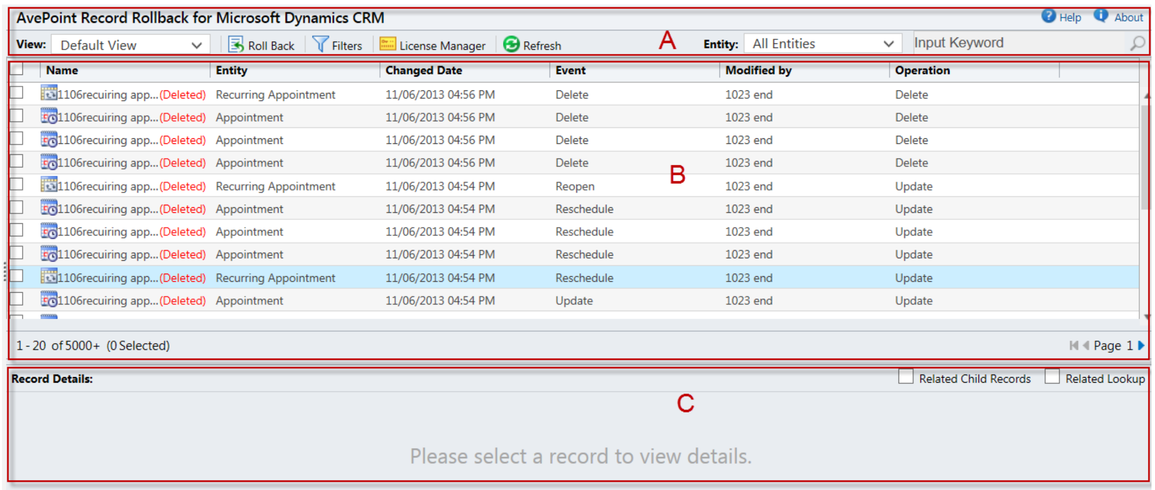

Figure 1: Record Rollback interface (Dynamics CRM 2011 environment shown).

Area A displays six major functions of Record Rollback.

- **View**: Switches among the Default View, All Deleted Items, and All Changed Items.
- **Roll Back**: Rolls back the field values recorded in the audit records to the previous values.
- **Filters**: Helps users quickly locate the specified audit records.
- **License Manager**: Views the license information or applies a new license.
- **Refresh**: Refreshes the current view and re-loads the audit records.
- **Entity** (Search): Quickly locates a specified entity type in the Default View or All Changed Items view. You can also enter the keyword for a more accurate search.

Area B lists major information of audit records.

- **Name:** Specifies the entity name.
- **Entity:** Specifies the entity type.

- **Changed Date:** Specifies when this audit record was generated.
- **Event:** Specifies what kind of entity events generated this audit record.
- **Modified by**: Specifies who changed the entity.
- **Operation**: Specifies whether this entity was created, updated, or deleted.

Area C displays detailed information of an audit record, which includes the **Field Name**, **Current Value**, and **Previous Value** of a selected entity. If you want to roll back records that are related to the selected record, select **Related Child Records** or **Related Lookup** before you perform the rollback operation.

- **Related Child Records**: The following example explains how this option works.
    a. Create a new account named **ABC** in **Accounts**.
    b. In **Contacts**, create a new contact whose **Last Name** is **123**. Besides, select **ABC** in the **Parent Customer** field.
    c. Delete the account **ABC**. You will find that the contact **123** is also automatically deleted.
    d. In the **Record Rollback** interface, select the deleted entity **ABC** and the option **Related Child Records**, click **Roll Back**.

  Result: You will find that both the account **ABC** and the contact **123** are restored. The previously created relationship is also restored. If you do not select the option **Related Child Records** when rolling back the deleted entity **ABC**, the related contact **123** will not be restored.

- **Related Lookup**: The following example explains how this option works.
    a. Create a new contact whose **Last Name** is **456** in **Contacts**.
    b. Create a new account named **XYZ** in **Accounts**. Besides, select **456** in the **Primary Contact** field.
    c. Delete both the account **XYZ** and the contact **456**.
    d. In the **Record Rollback** interface, select the deleted entity **XYZ** and the option **Related Lookup**, click **Roll Back**.

  Result: You will find that the contact **456** is also restored. In addition, the previously created relationship is restored. If you only select the deleted account **XYZ** and perform a rollback operation, the operation will be completed with exception, which means in this example, that the account **XYZ** is restored, but its **Primary Contact** field has no value.

***Note**: The **Related Child Records** and **Related Lookup** options take effect only when an entity has lookup fields. The lookup field is the one through which an entity can set a relationship with another entity. In the examples above, the **Parent Customer** and **Primary Contact** fields are lookup fields, which can be identified by the search () button in the end of a field when you create or edit an entity.

Locating Desired Audit Records

On the Record Rollback interface, you can quickly locate the desired audit records by changing views, using filters, and searching a specific entity. If all of the three filtering functions are used, only the audit records that meet all of the filtering rules are displayed.

Changing Views

Select **All Deleted Items** or **All Modified Items** in the **View** drop-down list to change the **Default View**.

- If you select **All Deleted Items**, all of the audit records generated by the **Delete** operation are displayed.
- If you select **All Modified Items**, all of the audit records generated by the **Update** operation are displayed.
- The **Default View** displays all of the audit records generated by any operation performed upon an entity.

Using Filters

The filter function makes searching for and locating audit records a much easier task. To use the filter function, click **Filters**. A downward triangle (▾) button appears in the **Changed Date** and **Modified by** columns.

Changed Date

Using the **Changed Date** filter, the audit records are displayed within the specified time range in descending or ascending order.

Perform the following steps to search audit records by filtering the changed dates:

1. Click the downward triangle (▾) button displayed in the **Changed Date** column.
2. Specify the range of the changed date.
3. Click **OK** to display the audit records that generated in the specified time range.
4. Select the desired audit records for performing a rollback operation.

After you specify the time range, you can also click **Descending** or **Ascending** to display the audit records immediately.

- **Ascending** (A to Z): The changed date is sorted from the earlier time to the latest time.
- **Descending** (Z to A): The changed date is sorted from the latest time to the earlier time.

Modified by

Using the **Modified by** filter, audit records of certain entities that had **Delete**, **Update**, and **Create** operations performed upon them by a specific user are displayed.

Perform the following steps to search audit records by filtering the changed dates:

1. Click the downward triangle ( ) button displayed in the **Modified by** column. A search box appears.
2. Enter the keyword in the search box.
3. Click **OK** to display the audit records that meet the filtering rule.
4. Select the desired audit records for performing a rollback operation.

Using Entity Search

The entity search also functions as a filter, which helps you to quickly locate the desired audit records.
***Note:** The entity search function is not available in the **All Deleted Items** view.

Perform the following steps to search for a specified audit record:

1. Select an entity type in the **Entity** drop-down list. Only the audit records of entities in this specified type are displayed.
2. Enter a keyword in the search box for a more accurate search.
3. Click the search ( ) button to display the audit records that meet the filtering rule.
4. Select the desired audit records for performing a rollback operation.

Viewing Detailed Information of Audit Records

After you locate the desired audit records, a record drop-down list appears in the **Record Details** area. To view the detailed information of a record, select the entity name in the drop-down list. Then the **Field Name**, **Current Value**, and **Previous Value** information will be listed. If multiple audit records are selected, you can switch the entity name in the record drop-down list to view the details of a specified entity.

By viewing the detailed information of an audit record, the user can compare the current value and previous value of a modified field in an entity, which is very helpful to have a full understanding of the entity's change history. Therefore, the user can decide whether to roll back a specified audit record.

Rolling Back Audit Records

After locating the desired audit records and viewing the detailed information, perform the following steps to roll back the records.

1. Select one or multiple audit records among the located records.
2. (Optional) Select **Related Child Records** or **Related Lookup** if necessary.
3. Click **Roll Back** to restore the deleted entity or roll back the entity to the previous version.

4. Click **OK** when the pop-up message appears to make sure that you really want to perform this operation.
5. Click **Log Details** to view more information after the rollback operation completes.

Recycle Bin

Recycle Bin helps the user who has the security role of **AvePoint Record Rollback User Account** to manage the audit records of entities that had the **Delete** operation performed upon them only by the current end-user.

Getting Started

Navigate to **Workplace** > **My Work** > **Recycle Bin** to enter the Recycle Bin interface.

The following screenshot shows the Recycle Bin interface.

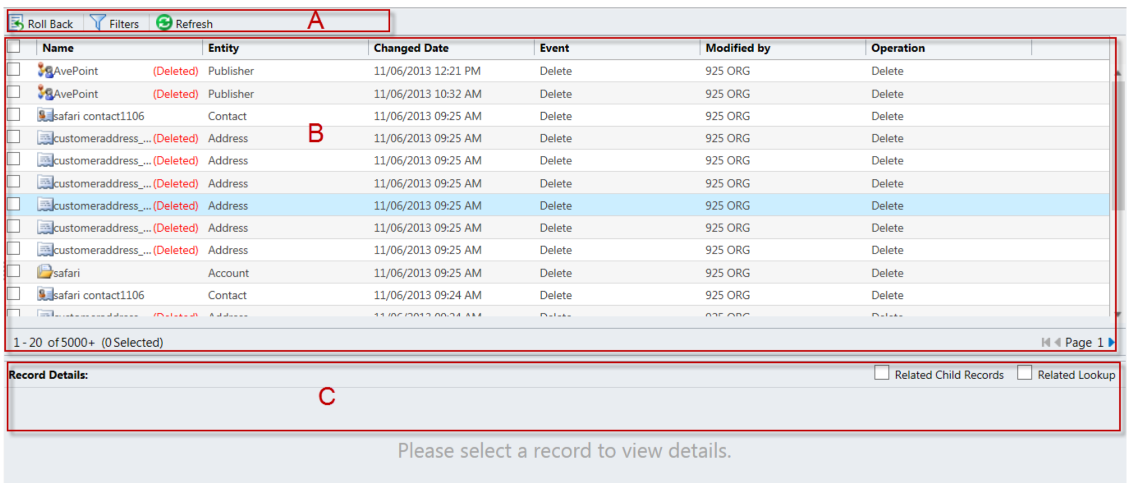

Figure 2: Recycle Bin interface (Dynamics CRM 2011 environment shown)**.**

Area A displays three major functions of Recycle Bin.

- **Roll Back**: Rolls back a selected audit record to restore the deleted entity.
- **Filters**: Quickly locates the audit records generated within a specific time period.
- **Refresh**: Refreshes the current view and re-loads the audit records.

Area B lists major information of audit records.

- **Name:** Specifies the entity name.
- **Entity:** Specifies the entity type.
- **Changed Date:** Specifies when this entity was deleted.
- **Event:** Specifies a delete event that generated this audit record.
- **Modified by**: Specifies who changed the entity. Recycle Bin only displays those entities that are deleted by the current end-user.

- **Operation**: Specifies that this audit record generates because the corresponding entity was deleted.

Area C displays detailed information of a deleted audit record, which includes the field name, current value, and previous value of a selected entity. If you want to roll back records that are related to the selected record, select **Related Child Records** or **Related Lookup** before you perform the rollback operation.

- **Related Child Records**: The following example explains how this option works.

    a. Create a new account named **ABC** in **Accounts**.

    b. In **Contacts**, create a new contact whose **Last Name** is **123**. Besides, select **ABC** in the **Parent Customer** field.

    c. Delete the account **ABC**. You will find that the contact **123** is also automatically deleted.

    d. In the **Record Rollback** interface, select the deleted entity **ABC** and the option **Related Child Records**, click **Roll Back**.

  Result: You will find that both the account **ABC** and the contact **123** are restored. The previously created relationship is also restored. If you do not select the option **Related Child Records** when rolling back the deleted entity **ABC**, the related contact **123** will not be restored.

- **Related Lookup**: The following example explains how this option works.

    a. Create a new contact whose **Last Name** is **456** in **Contacts**.

    b. Create a new account named **XYZ** in **Accounts**. Besides, select **456** in the **Primary Contact** field.

    c. Delete both the account **XYZ** and the contact **456**.

    d. In the **Record Rollback** interface, select the deleted entity **XYZ** and the option **Related Lookup**, click **Roll Back**.

  Result: You will find that the contact **456** is also restored. In addition, the previously created relationship is restored. If you only select the deleted account **XYZ** and perform a rollback operation, the operation will be completed with exception, which means in this example, that the account **XYZ** is restored, but its **Primary Contact** field has no value.

***Note**: The **Related Child Records** and **Related Lookup** options take effect only when an entity has lookup fields. The lookup field is the one through which an entity can set a relationship with another entity. In the examples above, the **Parent Customer** and **Primary Contact** fields are lookup fields, which can be identified by the search ( ) button in the end of a field when you create or edit an entity.

Locating Desired Audit Records

On the Recycle Bin interface, you can quickly locate the desired audit records by using the **Changed Date** filter. The **Changed Date** filter displays the audit records within the specified time range in descending or ascending order.

To use the filter function in Recycle Bin, perform the following steps:

1. Click **Filters**. The downward triangle ( ) button appears in the **Changed Date** column.
2. Click the downward triangle ( ) button.
3. Specify the range of the changed date.
4. Click **OK** to display the audit records that generated in the specified time range.
5. Select the desired audit records for performing a rollback operation.

After you specify the time range, you can also click **Descending** or **Ascending** to display the audit records immediately.

- **Ascending** (A to Z): The changed date is sorted from the earlier time to the latest time.
- **Descending** (Z to A): The changed date is sorted from the latest time to the earlier time.

Viewing Detailed Information of Audit Records

After you select an audit record, a record drop-down list appears in the **Record Details** area. To view the detailed information of a record, select the entity name in the drop-down list. Then the **Field Name**, **Current Value**, and **Previous Value** information will be listed. If multiple audit records are selected, you can switch the entity name in the record drop-down list to view the details of a specified entity.

By viewing the detailed information of an audit record, the user can compare the current value and previous value of a modified field in an entity, which is very helpful to have a full understanding of the entity's change history. Therefore, the user can decide whether to roll back a specified audit record.

Rolling Back Audit Records

After locating the desired audit records and viewing the detailed information, perform the following steps to roll back the records.

1. Select one or multiple audit records among the located records.
2. (Optional) Select **Related Child Records** or **Related Lookup** if necessary.
3. Click **Roll Back** to restore the deleted entity.
4. Click **OK** when the pop-up message appears to make sure that you really want to perform this operation.
5. Click **Log Details** to view more information after the rollback operation completes.

After you successfully rolled back a selected audit record, the deleted entity is restored. And you will find that the red word “deleted” in the bracket next to the entity name disappears. If an entity has been marked with “deleted”, the rollback operation has not been performed on this entity. Otherwise, the previously deleted entity has already been restored.

Version History

Version History records all of the operations performed on a specific entity by any user who has permissions to change the entity, and therefore helps the current user know better about what had happened on a specific entity and roll back the entity to any of the historical versions as needed.

The following screenshot shows the Version History interface.

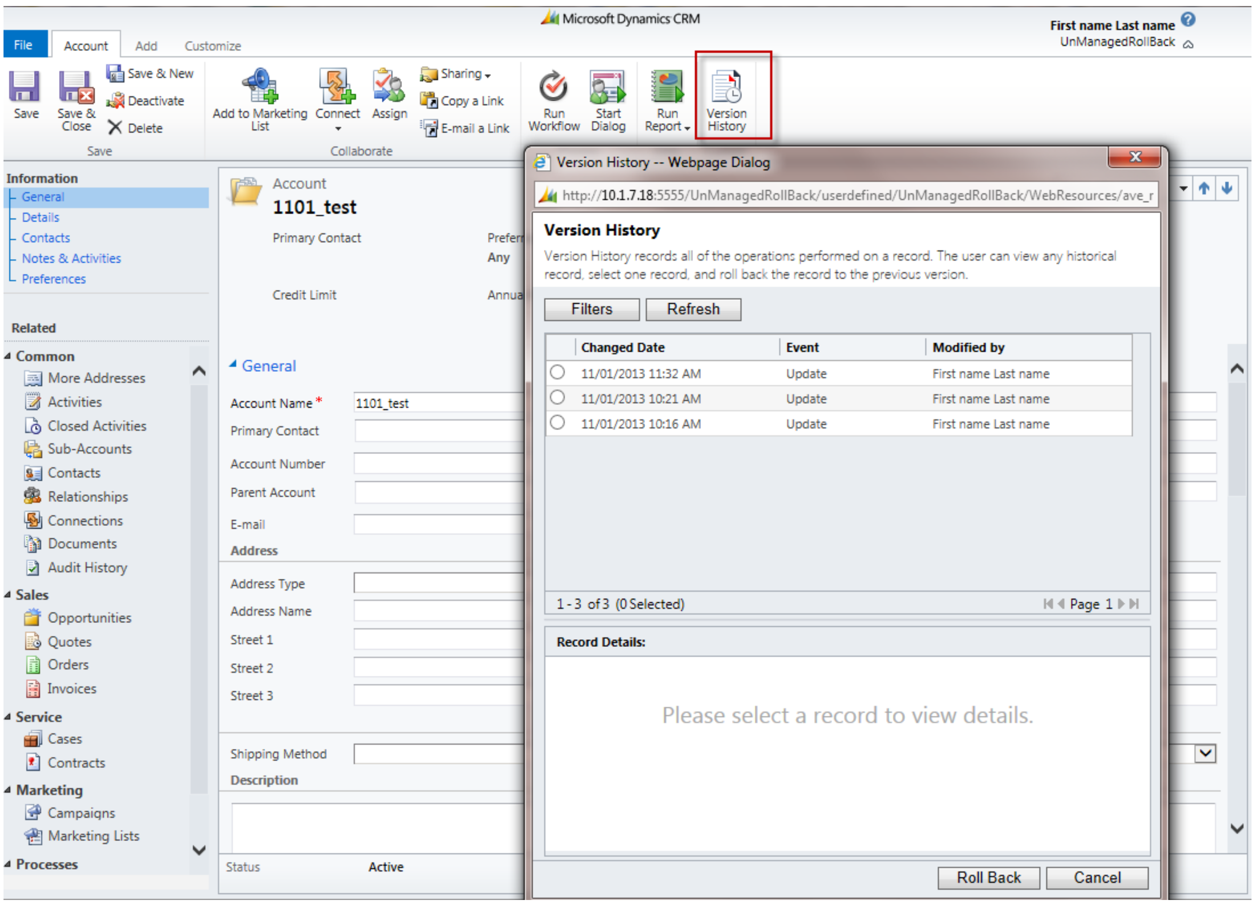

Figure 3: Viewing the Version History interface (Dynamics CRM 2011 environment shown).

The Version History page displays all audit records of the selected entity. The user can view the changed date, event, and who changed the entity. The **Filters** button helps quickly locate the desired audit record by specifying a time range in descending/ascending order. Each time you want to view all of the audit records or select a new record, click the **Refresh** button.

Using the Version History Feature

Perform the following steps to use the Version History feature:

1. Select an entity group on the left pane of the **Sales**/**Service**/**Marketing** page.

2. Click any entity name in this group to view its detailed information on a new page.
3. Click **Version History** in the function ribbon.
4. Click **Filters** to specify the time range of **Changed Date** to quickly locate desired audit records.
5. Select any historical record to view its detailed information, which includes the field name, current value, and previous value.
6. Click **Roll Back** to restore the fields of the selected entity to previous values as needed.

After the rollback operation completes, you can click **Log Details** to view more information. At the same time, a new record for this rollback operation is displayed in Version History.

Appendix A – Comparison of Recycle Bin and Record Rollback Functionality

Both Recycle Bin and Record Rollback enable users to manage the audit records of entities that had certain operations performed upon them. In addition, the two functions have a similar user interface. The following table helps you know the major differences between Recycle Bin and Record Rollback.

Options	Record Rollback	Recycle Bin
User Permission	AvePoint Record Rollback Admin Account	AvePoint Record Rollback User Account
Entity Search	Select an entity type in the entity drop-down list and enter the keyword to quickly locate the desired audit records.	Unsupported
Filters	Quickly locate the desired audit records using the **Changed Date** and **Changed by** filters.	Only the **Changed Date** filter is supported because all of the audit records displayed in Recycle Bin are generated by the current user.
Operation/Event	**Delete**, **Update**, and etc.	**Delete** only
Rollback Result	The fields of a selected entity are rolled back to the previous values.	The deleted entity is restored.

Appendix B – Supported and Unsupported Entities in Record Rollback

The following table displays a list of supported and unsupported entities in AvePoint Record Rollback for Dynamics CRM.

This table provides support information for the following five actions in Dynamics CRM:

- Can I roll back a deleted entity?
- Can I roll back an entity whose fields have been updated?
- Can I roll back an entity whose state has changed?
- Can I roll back corresponding entities by selecting Related Lookup when rolling back the current entity?
- Can I roll back corresponding entities by selecting Related Child Records when rolling back the current entity?

Entity	Update	Delete	Status Change	Related Lookup	Related Child Records
Account	Yes	Yes	Yes	Yes	Yes, except when the related entity is an activity.
Activity	N/A	N/A	N/A	N/A	N/A
Address	Yes	Yes	N/A	N/A	N/A
Appointment	Yes	Yes	Yes	Yes	N/A
Article	Yes	Yes, except for Article Comment	Yes	Yes	N/A
Article Template	N/A	N/A	N/A	N/A	N/A
Business Unit	Yes, except the updates of Parent Business.	Yes, except when the entity was disabled before being deleted.	No	Yes	Yes, except when the related entity is Facilities/Equipment or Security Role.
Campaign	Yes	Yes	Yes	Yes	Yes, except when the related entity is Campaign Activity and when there are multiple related records.
Campaign Activity	Yes	Yes, except when rolling	Yes	Yes, except when the	N/A

Entity	Update	Delete	Status Change	Related Lookup	Related Child Records
		back together with Campaign.		related entity is Campaign.	
Campaign Response	Yes	Yes, except when rolling back together with Campaign.	Yes	N/A	N/A
Case	Yes	Yes	Yes	Yes	Yes, except when the related entity is a case resolution, which cannot be rolled back by selecting this option.
Case Resolution	N/A	Yes	Yes	Yes	N/A
Competitor	Yes	Yes	N/A	Yes	No
Competitor Address	No	No	No	No	No
Connection	Yes	No	Yes	Yes	N/A
Connection Role	No	No	No	No	No
Contact	Yes	Yes	Yes	Yes	Yes, except when the related entity is an activity.
Contract	Yes	Yes	Yes, except when the state of the entity is On Hold.	Yes	Yes
Contract Line	Yes	Yes	N/A	N/A	N/A
Contract Template	N/A	Yes, except for rolling back Calendar Data.	N/A	N/A	N/A
Currency	N/A	N/A	N/A	N/A	N/A
Customer Relationship	N/A	N/A	N/A	N/A	N/A
Data Map	Yes	No	Yes	No	No
Date and Time	Yes	N/A	N/A	N/A	N/A
Decimal Number	Yes	N/A	N/A	N/A	N/A
Dialog Session	No	No	No	No	No
Discount	Yes	Yes	N/A	Yes	N/A
Discount List	Yes	Yes	Yes	N/A	Yes

Entity	Update	Delete	Status Change	Related Lookup	Related Child Records
Document Location	No	No	No	No	No
Duplicate Detection Rule	No	No	No	No	No
Duplicate Rule Condition	Yes	Yes	N/A	No	N/A
E-mail	Yes	Yes	Yes	Yes	Yes, except when the related entity is Email Attachment.
E-mail Attachment	No	No	No	No	No
E-mail Template	Yes, but Version History is unavailable.	Yes	N/A	N/A	N/A
E-mail Server Profile	No	No	No	No	No
Mailbox	Yes	Yes	No	No	N/A
Facility/Equipment	No	No	No	No	No
Fax	Yes	Yes	Yes	Yes	N/A
Field Permission	No	No	No	No	No
Field Security Profile	No	No	No	No	No
Filter	N/A	N/A	N/A	N/A	N/A
Floating Point Number	Yes	N/A	N/A	N/A	N/A
Goal	Yes	Yes	Yes	Yes	Yes, except when the related entity is a child goal, that the relationship cannot be restored.
Goal Metric	Yes	Yes	Yes	Yes	Yes
Image	No	N/A	N/A	N/A	N/A
Internal Address	No	No	No	No	No
Invoice	Yes	Yes, except when you select Related Child Records to restore a Canceled or Complete invoice.	Yes, except when you cancel the entity whose status is Paid.	Yes	Yes
Invoice Product	Yes, but the Invoice	Yes	N/A	Yes	N/A

Entity	Update	Delete	Status Change	Related Lookup	Related Child Records
	record must be also selected.				
Lead	Yes	Yes	Yes	N/A	N/A
Lead Address	No	No	No	No	No
Letter	Yes	Yes	Yes	Yes	N/A
Lookup	Yes	N/A	N/A	N/A	N/A
Mail Merge Template	Yes, but Version History is unavailable.	Yes	Yes	N/A	N/A
Marketing List	Yes, but you cannot roll back the operation which adds Marketing list members.	Yes, but Marketing list members will be lost after the rollback operation.	Yes	N/A	Yes, except when the related entity is Campaign.
Multiple Lines of Text	Yes	N/A	N/A	N/A	N/A
Note	Yes	Yes	N/A	N/A	N/A
Opportunity	Yes	Yes	Yes	Yes	Yes
Opportunity Close	N/A	No	Yes	Yes	N/A
Opportunity Product	Yes	Yes	Yes	N/A	N/A
Opportunity Relationship	N/A	Yes	N/A	Yes	N/A
Order	Yes, except when you add Order Product, which changes the Amount value.	Yes	Yes	Yes	Yes, except when the related entity is Activity.
Order Close	N/A	No	No	Yes	N/A
Order Product	Yes, but you have to select the Order records when rolling back this entity.	Yes	N/A	N/A	N/A

Entity	Update	Delete	Status Change	Related Lookup	Related Child Records
Organization	No	No	No	No	No
Option Set	Yes	N/A	N/A	N/A	N/A
Phone Call	Yes, but Version History is unavailable.	Yes	Yes	Yes	N/A
Post Configuration	No	No	No	No	No
Post Rule Configuration	No	No	No	No	No
Price List	Yes	Yes	Yes	N/A	Yes
Price List Item	Yes	Yes	N/A	Yes	N/A
Process	No	No	No	No	No
Product	Yes	Yes	Yes	Yes	Yes, except when the related entity is Substitute or Sales Literature.
Profile Album	N/A	N/A	N/A	N/A	N/A
Publisher	Yes, but Version History is unavailable.	Yes	N/A	N/A	N/A
Queue	Yes	Yes	Yes	N/A	N/A
Queue Item	Yes	Yes	N/A	Yes	N/A
Quick Campaign	No	No	No	No	No
Quote	Yes, except when you add Quote Product, which changes the Amount value.	Yes, except when rolling back a Quote entity whose status is Closed. In this case, the entity will be in Draft state after the rollback operation.	Yes	Yes	Yes, except when the Quote is in Active state and the related entity is Quote Product. In this case, Quote Product cannot be restored.
Quote Close	N/A	No	Yes	No	N/A
Quote Product	Yes, except when the related Quote cannot be	Yes	N/A	Yes	N/A

Entity	Update	Delete	Status Change	Related Lookup	Related Child Records
	edited.				
Recurring Appointment	Yes	Yes	No	Yes	N/A
Report	Yes	Yes	N/A	N/A	N/A
Report Related Category	N/A	Yes	N/A	No	N/A
Resource	No	No	No	No	No
Resource Expansion	No	No	No	No	No
Resource Group	N/A	N/A	N/A	N/A	N/A
Rollup Field	Yes	Yes	N/A	Yes	N/A
Rollup Query	Yes	Yes	Yes	N/A	N/A
Sales Literature	Yes	Yes, except for Sales Attachment.	N/A	Yes	No
Saved View	Yes	Yes	Yes	N/A	N/A
Scheduling Group	No	No	No	No	No
Security Role	No	No	No	No	No
Service	Yes	Yes	Yes	N/A	N/A
Service Activity	Yes	Yes	Yes	Yes	N/A
SharePoint Site	Yes	Yes	Yes	N/A	No
Single Line of Text	Yes	N/A	N/A	N/A	N/A
Site	Yes	Yes	No	No	No
Solution	No	No	No	No	No
Subject	Yes	Yes	N/A	Yes	N/A
System Chart	No	No	No	No	No
Task	Yes	Yes	Yes	Yes	N/A
Team	No	No	No	No	No
Territory	Yes	Yes	N/A	N/A	N/A
Two Options	Yes	N/A	N/A	N/A	N/A
Unit	Yes	Yes	N/A	Yes	N/A
Unit Group	Yes	Yes	Yes	N/A	Yes, except for the Unit in the Related List.
User	Yes	N/A	N/A	N/A	N/A
User Chart	Yes	Yes	N/A	N/A	N/A
View	No	No	No	No	No
Wall View	N/A	N/A	N/A	N/A	N/A
Whole Number	Yes	N/A	N/A	N/A	N/A

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AvePoint, Inc.
Harborside Financial Center, Plaza 10
3 Second Street, 9th Floor
Jersey City, New Jersey 07311
USA