Adoxio Auto-Numbering allows Dynamics 365 administrators to create auto-number definitions across both system and custom entities. A single definition can be configured for multiple entities and can include the following features:

- random character sequence
- date and time
- custom prefix or suffix

Adoxio Auto-Numbering uses two entities: **Auto-Numbering Definition** and **Auto-Numbered Entity**. An Action named **Generate Auto-Number** (abs_GenerateAutoNumber) is also supplied with the solution that allows Dynamics 365 administrators to manually generate a value from an **Auto-Numbering Definition** within a workflow or other process.

AUTO-NUMBERING DEFINITION

The **Auto-Numbering Definition** entity defines the parameters used to generate numbers.

Fields

Field	Field Requirement	Description
Field Name	Business Required	The name for this definition
Format	Business Required	The format string.

The Format field supports the following syntax:

{autonumber}

Inserts the main sequential numerical value into the final value. To define the number of digits, use the Digits field (below).

{random}

Inserts a sequence of 4-6 random alphanumeric characters into the final value. To specify the number of characters, use the Random Text Length field (below).

{datetime}

Inserts the current date and time into the final value. To specify the date format, use the Date/Time Format field (below).

{{, }}

Field	Field Requirement	Description
		Escape code to insert '{' or '}' characters.
Digits	Business Recommended	The number of digits in the autonumber portion of the final value. If unspecified, the default is 6.
Increment	None	The number by which sequential values are incremented. If unspecified, the default is 1.
Initial Value	None	The first numerical value issued by this definition. If unspecified, the default is 1.
Random Text Length	None	The number of random characters inserted into the random position.
Date/Time Format	None	The format for the date and time in the datetime position. This uses standard .NET Framework date and time formatting. For more information, please refer to the following: • Standard Date and Time Format Strings • Custom Date and Time Format Strings

Examples

Format	Sample Output	Notes
X-{autonumber}	X-000001	• Digits: 6
X-{autonumber}-{random}	X-000002-A1Z8HG	• Random Text Length: 6
X-{autonumber}-{datetime}	X-000003-2017-06-01	• Date: July 1, 2017

Format	Sample Output	Notes
		• Date/Time Format: yyyy-MM-dd
X-{{{autonumber}}}	X-{000004}	

AUTO-NUMBERED ENTITY

The **Auto-Numbered Entity** entity defines how an **Auto-Numbering Definition** is automatically applied to a specific entity. When a record of this type is saved, SDK Message Processing Steps are created or updated that will apply an auto-numbered value to the specified entity.

Fields

Field	Field Requirement	Description
Name	Business Recommended	The name for the record. If the record is created using the default form in CRM, this will be set to the Display Name for the entity used in the Entity Logical Name field (below).
Entity Logical Name	Business Required	The logical name for the entity to which the **Auto-Numbering Definition** will apply.
Auto-Numbering Definition	Business Required	The **Auto-Numbering Definition** that will be applied to this entity.
Target Field	Business Required	The logical name for the field that will receive the auto-numbered value.
Activation Field	None	The logical name for the field that will trigger auto-numbering on the entity. • If unspecified, auto-numbering will be applied on creation of a new record of the given entity. • If specified, auto-numbering will only be applied to a record if and when the specified activation field is

Field	Field Requirement	Description
		changed, whether that is during creation or during an update. This field can be used to control when a new auto-numbered value is generated in order to prevent creation of auto-numbered values that will not be used by the business. For example, a business may wish to prevent auto-numbering case (incident) records for which information is not yet fully gathered.
Execution Order	None	Corresponds to the Execution Order for an SDK Message Processing Step. This can be used to control the order that plugin steps for the given entity are applied without using the Dynamics 365 SDK Plugin Registration Tool. If unspecified, the plugin step will be registered with an Execution Order value of 0 (zero).
Execution Mode	Business Required	Corresponds to the Execution Mode for an SDK Message Processing Step. This is used to define whether the auto-numbered value is applied synchronously or asynchronously. The default value is Synchronous.

GENERATE AUTO-NUMBER

The **Generate Auto-Number** action can be invoked on an **Auto-Numbered Definition** manually through a workflow or other process.

Arguments

Argument	Type	Required	Direction	Description
Value	String	Required	Output	The auto-numbered value.

Note: The **Generate Auto-Number** action invokes a Custom Workflow Activity also named Generate Auto-Number. *Direct invocation of this workflow activity is not supported*. To ensure that auto-numbered values are unique, the value *must* be generated using the **Generate Auto-Number** action.