Work item fields and attributes

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Work item fields are used to track information. Each work item type (WIT) definition specifies the fields defined for that WIT. Each field is associated with a number of attributes, many of which are set by the system and cannot be changed.

Each field is defined by the following three attributes.

- Data type: Specifies the type of data that can be entered into the field, such as Boolean, Double, Integer, HTML, and String. For descriptions of each data type, see Query fields, operators, and macros.
- Friendly name: Specifies the name assigned to the field and that you select for a Field in a query clause. This name may differ from that displayed on the work item form.
- Reference name: Specifies the name that you use when creating WIQL query or an ad hoc work item
 template, using REST API commands, or defining XML work item type definitions. Once defined, the
 reference name cannot be changed.

For a description of each field attribute and how you can list them, see <u>Field attributes</u> and <u>List field attributes</u> later in this article. For an overview of WITs and work items, see <u>Track work with user stories</u>, issues, bugs, <u>features</u>, and <u>epics</u>.

Field names

The field friendly name identifies each work item field. When adding a custom field, make sure the friendly name falls within these guidelines:

- Must be unique within the organization or project collection
- Must be 128 or fewer Unicode characters
- Can't contain any leading or trailing spaces, nor two or more consecutive spaces
- Must contain at least one alphabetic character
- Can't contain the following characters: .,;'`:~\/*|?"&%\$!+=()[]{}<> .

For additional information, see Naming restrictions and conventions.

System and predefined fields

All system defined fields have reference names that begin with *System*, for example, System.AreaPath, System.AssignedTo, and continue in that pattern.

Predefined fields defined by the default process begin with Microsoft.VSTS and then further differ based on their usage. Examples of predefined fields that are used in common, for scheduling purposes and integration with Office Project, for integration with Team Foundation Build, and integration with test case management (TCM) are as follows:

- Microsoft.VSTS.Common.Priority
- Microsoft.VSTS.Scheduling.DueDate
- Microsoft.VSTS.Build.FoundIn
- Microsoft.VSTS.TCM.Steps

For an overview of all system and predefined fields that are defined for the default processes/process templates, see <u>Work item field index</u>. For more information about specifying field names, see <u>Naming restrictions</u>.

Custom fields

Because custom fields are defined for an organization or project collection, you can't add a custom field to a process with the same field name that you add to another process.

When adding custom fields, note the following limits:

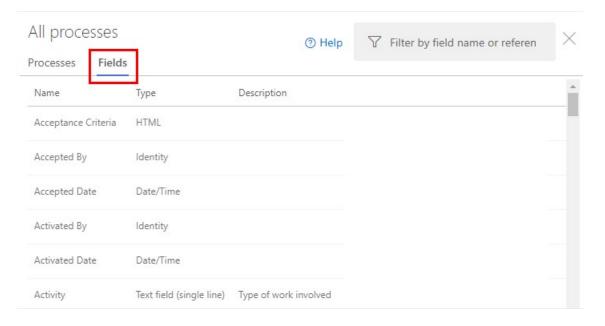
- A maximum of 256 fields can be defined for each WIT
- A maximum of 512 fields can be defined per process

The field data type determines the kind and size of data that you can store in the field. A field can have only one type defined within a project collection. This restriction encourages organizations to use common fields across projects and work item types.

When you add a custom field to an inherited process, Azure DevOps assigns a reference name based on the process name and the name of the field. For example, you add a field named Triage to the My Agile process, the reference name is MyAgile.Triage. No spaces are allowed within the reference name.

How can I determine the field data type?

You can view the data type of fields defined for your organization by opening the Process>Fields page.



Field attributes

There are a number of non-changeable and virtually hidden attributes for each work item field. The following table describes each attribute.

① Observação

The attribute listed in the first column of the table is supported through the <u>Fields - Get REST API</u> and <u>Work Item Types Field - Get</u> commands. The attribute listed in the second column is supported through the Work Item Field Explorer (WIFE) tool, and the <u>FieldDefinition Properties</u>. The attributes assigned to a field depend on the platform and version you use.

Attribute (REST)	Attribute (WIFE)	Attribute type	Description	Can change?
	AllowedValues	collection	Gets the collection of valid values for a field that contains picklist values. You can change this by specifying a picklist or global list (on-premises).	Yes
canSortBy	CanSortBy	boolean	Indicates whether you can sort query results with this field.	No
description	HelpText	string	Specifies a description for the field, which also defines the help text that appears when you hover over the field within the work item form.	Yes
	Id	boolean	Specifies the internal ID of the field.	No
	IsCloneable	boolean	Indicates whether the value defined for the field is copied when a user chooses to copy a work item. For example, the work item Title, Tags, and Description are copied, but the ID and History fields aren't copied.	No
	IsComputed	boolean	Indicates if the value set by this field is computed by the system (True) or not (False). Examples of computed fields are ones that are set by the system, such as the ID, Revised Date, Changed Date, and External Link Count.	No
	IsCoreField	boolean	Indicates whether this field is specified for all work item types.	No
	Is Editable	boolean	Indicates if users can modify this field (True) or not (False). Examples of non-editable fields	No

Attribute (REST)	Attribute (WIFE)	Attribute type	Description	Can change?
			are ones that are set by the system, such as the ID, Revision, Created By, and Changed By fields	
isldentity	IsIdentity	boolean	Indicates whether this field is an Identity field. Identity fields are string fields used to store user identities.	No
	IsIndexed ¹	boolean	Indicates whether this field is indexed to support search.	No
	IsLongText	boolean	Indicates that the field can contain more than 255 characters, such as fields assigned a data type of PlainText, HTML, or History.	No
isPicklist ²		boolean	Indicates whether the field is associated with a picklist. The value is set to True when a custom field is defined for Azure DevOps Services and Picklist (String) or Picklist (Integer) type is selected. The value is set to False for inherited fields that define picklists.	No
is Picklist Suggested ²			Indicates whether the field allows users to enter their own values for a picklist. The value is set to True when a custom field is defined for Azure DevOps Services, Picklist (String) or Picklist (Integer) type is selected, and the checkbox for Allow users to set their own values is checked.	Yes
isQueryable	IsQueryable	boolean	Indicates if the field shows up within the set of fields you can add to filter a query (True) or not (False). Most fields are queryable.	No
	IsReportable ³	boolean	Indicates if the reportable attribute is defined or set to anything other than None .	Yes
	Is Used In Global Workflow	boolean	Indicates if the field is defined within a global workflow.	No
	IsUserNameField	boolean	Indicates if the field is used to display an Identity field.	No

Attribute (REST)	Attribute (WIFE)	Attribute type	Description	Can change?
name	Name	string	Friendly name assigned to the field. The friendly name can't be changed for Azure DevOps Services, but can be changed for on-premises using the witadmin changefield command.	On-prem only
picklistld			If the field is a picklist, the identifier of the associated picklist, otherwise null. A unique GUID value is assigned when a custom field is defined for Azure DevOps Services and Picklist (String) or Picklist (Integer) type is selected.	No
	Prohibited Values	collection	Gets the collection of prohibited values for a field that specifies such values. You can only define prohibited values for onpremises deployments.	On-prem only
readOnly		boolean	Indicates whether the field is set to read only. For Azure Cloud Services, only custom fields can be changed to be read only. System fields cannot be modified.	Yes
referenceName	ReferenceName	string	Specifies the reference name of the field definition.	No
	Reporting Attributes ³		Specifies Detail , Dimension , or Measure , depending on whether and how you want the field to be included in reports. Data from fields that have a value other than None for this attribute are exported to the data warehouse and can be included in reports.	On-prem only
	Reporting Name ³	string	Specifies the label for a field when data appears in reports. If you do not specify a value, the field's friendly name is used.	On-prem only
	ReportingReferenceName ³	string	Specifies a different reference name to a field that is used when data is exported to the relational data warehouse. If you do not specify a value, the fields reference name is used.	On-prem only

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Attribute (REST)	Attribute (WIFE)	Attribute type	Description	Can change?
supported Operations		set	The set of query operators that are valid for use when referencing this field. For a quick reference of supported operations based on data type, see Query quick reference, Operators and macros supported for each data type.	No
	SupportsTextQuery	boolean	Indicates whether the field supports text queries such as Contains Words, Does Not Contains Words.	No
	SystemType	string	Specifies the data type of the field, referencing the system name such as System.DateTime, System.String, and so on.	No
type	FieldType	string	Specifies the data type of the field, such as Boolean, DateTime, Integer, String, and so on. For a complete list and descriptions, see Query fields, operators, and macros	No
usage	Usage	string	Specifies whether the field is intended for use with work items (WorkItem) or work item link (WorkItemLink) objects. The usage for most fields is WorkItem. For a complete list of usage values, see Get Fields, FieldUsage	No

Notes:

- 1. For on-premises deployments, you can enable indexing for a field to improve query response times when filtering on the field. For more information, see Indexed fields later in this article.
- The isPicklist and isPicklistSuggested attributes are only assigned to custom fields defined for an inherited process. The Inherited process model is only supported for Azure DevOps Services and Azure DevOps Server 2019.
- 3. All reporting attributes are valid only for on-premises deployments whose projects have been configured to support SQL Server Reporting and SQL Server Analysis Services.

List field attributes

You can list the attributes assigned to a field by using the <u>Fields - Get REST API</u>. Enter your organization name for *OrganizationName*.

REST © Copiar

```
https://dev.azure.com/OrganizationName/_apis/wit/fields/FieldReferenceName
```

For example, here we list the attributes for the Iteration Path, specifying the reference name, System.IterationPath, for the fabrikam organization.

```
REST

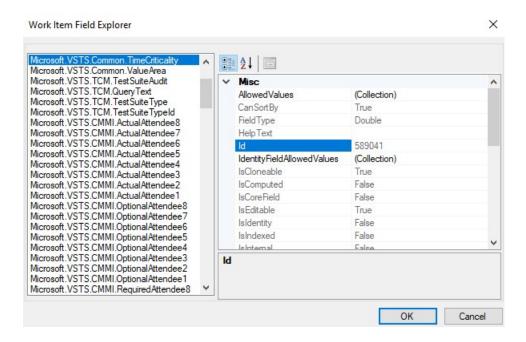
https://dev.azure.com/fabrikam/_apis/wit/fields/System.IterationPath
```

Returned data:

```
JSON
                                                                                             Copiar
"name": "Iteration Path",
"referenceName": "System.IterationPath",
"description": "The iteration within which this bug will be fixed",
"type": "treePath",
"usage": "workItem",
"readOnly": false,
"canSortBy": true,
"isQueryable": true,
"supportedOperations": [
"referenceName": "SupportedOperations.Under",
"name": "Under"
},
"referenceName": "SupportedOperations.NotUnder",
"name": "Not Under"
},
"referenceName": "SupportedOperations.Equals",
"name": "="
},
"referenceName": "SupportedOperations.NotEquals",
"name": "<>"
},
"referenceName": "SupportedOperations.In",
"name": "In"
},
"name": "Not In"
}
"isIdentity": false,
"isPicklist": false,
"isPicklistSuggested": false,
"url": "https://dev.azure.com/mseng/_apis/wit/fields/System.IterationPath"
```

Work Item Field Explorer

You can look up the assignments of field attributes using the Work Item Field Explorer tool.



To access the Work Item Field Explorer, you must install the Process Editor (requires that you have installed a version of Visual Studio). <u>Install the TFS Process Template editor from the Visual Studio Marketplace</u>. You can use this version of the Process Editor to modify the old-style work item forms. You can't use it to edit forms associated with the <u>new web forms</u>.

Add and modify fields

To add fields to a process, you add them to one or more work item types. To learn more, see <u>Customize an inheritance process</u>.

Related articles

- Query quick reference
- Work item field index
- Add and manage fields for an inherited process