



Numerify

Numerify360™ for IT

**Software Development Analytics - Online
Help**

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Introduction to SDA

Software Development Life Cycle, also known by its popular acronym SDLC, refers to the combined process of planning, designing, testing, and deploying a software. SDLC clearly defines the best practices and methodologies to be followed to successfully transform an idea from the drawing board to usable software. SDLC mandates that every step of the project development is recorded to help in assessing and measuring the success of a project. To facilitate such assessments, most organizations use tracking tools such as JIRA, Microsoft TFS, HP Agile Manager, and so on.

Numerify360™ for IT, through its latest offering, aims to provide IT Business Analytics across all stages of Application Lifecycle Management (ALM), of which SDLC is a very important part. An application can broadly be envisioned to pass through three different but co-existing phases i.e., the PLAN - BUILD - RUN.

- PLAN - Deciding and planning the right software projects
- BUILD - Executing the plan - building the software
- RUN - Managing and monitoring the built software

Numerify's new offering, Software Development Analytics or SDA provides business analysis for the BUILD phase of ALM. With SDA, you can track work of all types (requirements, coding, testing, and so on). You can create dossiers to better understand your project indices. Using SDA, you can gain clarity and steer your project in the right direction. Project Management is all about identifying threats, delays, or blockers and identifying these in the early stages. SDA facilitates this by offering you graphical representation of key project health indicators like project velocity, number of work items in the backlog, burn down charts, and so on.

Managing Software Development Process

The Software Development Analytics (SDA) module helps you analyze all your software projects developments. With SDA, resources are better informed to work on the most appropriate activity to deliver the best result for the business. The self-service dossiers provide insights into crucial project management indicators such as, overdue work items, time required to resolve work items, 'open to close' work item ratio, reopened work items , and so on.

Please refer to the use cases explained in the [Software Development Analytics User Guide](#) to understand how SDA can help you analyze certain project indicators and how you can use SDA to identify problem areas and enable teams to produce the desired results.

Source Systems used in SDA

Most organizations use tracking tools to track the progress of work items. Tracking tools provide capabilities to store useful project and product information, log work, and track work items in every stage that it wades through.

SDA uses data imported from a source system. Data from source system is extracted and placed in a data warehouse. This data is then sliced and diced to derive the key metric formula. These formula are graphically represented in the SDA dossiers for better understanding.

Numerify's SDA is certified on the following Source Systems:

Source System	Version Number
Atlassian JIRA On-premise	7.3.7
Atlassian JIRA Cloud	-
Microsoft TFS	14.114.26403.0
Jenkins	2.80

Software Development Analytics dossier

The Software Development Analytics (SDA) dossiers provide an overall view across your software development process, such as analyzing your backlog work items, viewing the number of issues for every sprint, trend of issues over a time period, and story points assigned to each work item.

For example, based on the age of backlog work items, you can groom your backlog and prioritize work items that have to be included in a sprint. Using the Story Points dossier, you can analyze the story points assigned to a specific assignee in a sprint and understand the user's sprint velocity.

The SDA dossiers are provided as an out-of-the-box dossiers, which are pre-built, have an interactive reporting mechanism, and are modeled using cached datasets. The dossiers have multiple sheets with each sheet having panels to create different analytical reports.

In the dossier, you can access the list attributes and metrics from the 'Dashboard Datasets' panel to create your reports.

Using the SDA dossier, you can analyze the following areas of work item management:

- [Backlog Analysis](#)
- [Issue at a Glance](#)
- [Issue at a Glance Trend](#)
- [Story Points](#)

Using the SDA Work Item Burn Down dossier, you can analyze the following areas of sprint management:

- [Work Item Burn Down](#)
- [Story Points Burn Down](#)
- [Business Value Burn Down](#)
- [Estimate Burn Down](#)

These dossiers are available as separate sheets within the SDA dossier. Here is an example of how the dossiers are displayed:



Each of these sheets enable you to perform detailed analyses for the areas listed above.

Backlog Analysis

The Backlog Analysis dossier of SDA enables you to analyze backlog work items to understand average time taken for a work item to move from created to resolved, number of work items for each assignee, status of all created work items, average age of work items, and so on.

You can view the following reports from the Backlog Analysis dossier:

- **Issue Count by Project** — Displays a count of created work items categorized by project and the average duration taken by work items to move from Created state to Resolved state.
- **Volume by Assignee** — Displays the number of In Progress Work Items for each assignee.
- **Status** — Provides an overall status of created work items by indicating if the work item is in progress or not.
- **Avg Age by Assignee** — Displays the average age of a work item from Created state to Resolved state categorized based on assignee.
- **Aging** — Displays the number of created work items over a monthly period.
- **Issue Type** — Displays the average duration taken by work items to move from Created state to Resolved and Completed state, categorized based on the work item type.
- **Issue Details** — Provides details about work items in a tabular format. You can view details such as Work Item Number, Summary, Assigned To, Work Item Type, and Avg Cycle Time.

Metrics Used

Metric Name	Description	Formula	Expected Value
Avg Cycle Time (Days)	Average number of days since the work item first moved to the IN PROGRESS until it is COMPLETED. If the work item is completed, the value is the difference between In Progress Date and the Completed Date else the value is the difference between In Progress Date and the current time	Age Since In Progress (in days)/ [Created work items - Proposed work items]	0 or >0
Avg Duration Created to Completed (Days)	Average number of days from the time the work item was created to it being completed. The value of this metric is blank if the	[Duration Created to Completed (days)] /	>0, Closer to 0 is ideal

Metric Name	Description	Formula	Expected Value
	work item is not yet completed	[Completed Work Items]	
Avg Duration Created to Resolved (Days)	Average number of days from the time the work item was created to it being resolved. The value of this metric is blank if the work item is not yet resolved	[Duration Created to Resolved (days)] / [Resolved Work Items]	>0, Closer to 0 is ideal
Created Work Items	Count of all work items that are created.	Count [Work Items Created]	>=0
In Progress Work Items	Count of all work items whose current status category is "In Progress"	Count [Work Items In Progress]	>=0

Issue at a Glance

The Issue at a Glance dossier of SDA enables you to analyze work items assigned for every sprint, assignees with the most work items, time taken to resolve, and work items created in a month.

You can view the following reports from the Issue at a Glance dashboard:

- **Issue Count by Sprint** — Provides the count of work items in each sprint with the colors representing the status of the work items.
- **Time to Resolve by Priority** — Displays the average duration taken by work items to move from the Created state to Resolved state, categorized based on Priority.
- **Assignee with Most Issues** — Provides an overall view of the number of work items assigned to a person. The report displays both In Progress work items and Created work items, and is displayed as a Bubble chart with each bubble representing an assignee and the size indicating the number of In Progress work items.
- **Bug Detection** — Displays the number of work items that are created in a specific month.
- **Issue Details** — Provides details about work items in a tabular format. You can view details such as Work Item, Created Date Time, Summary, Assigned To, Work Item Type, Avg Cycle Time, and Avg Duration In Progress to Resolved.

Metrics Used

Metric Name	Description	Formula	Expected Value
Avg Cycle Time (Days)	Average number of days since the work item first moved to the IN PROGRESS until it is COMPLETED. If the work item is completed, the value is the difference between In Progress Date and the Completed Date else the value is the difference between In Progress Date and the current time	Age Since In Progress (in days) / [Created work items - Proposed work items]	0 or >0
Avg Duration Created to Resolved (Days)	Average number of days from the time the work item was created to it being resolved. The value of this metric is blank if the work item is not yet resolved	[Duration Created to Resolved (days)] / [Resolved Work Items]	>0, Closer to 0 is ideal
Avg Duration	Average number of days from the first time the work item moved to the In Progress state to it being resolved.	[Duration InProgress to Resolved (days)] / [Resolved Work Items]	>0, Closer to 0 is ideal

Metric Name	Description	Formula	Expected Value
InProgress to Resolved (Days)	The value of this metric is blank if the work item is not yet resolved		
Created Work Items	Count of all work items that are created.	Count [Work Items Created]	>=0
In Progress Work Items	Count of all work items whose current status category is "In Progress"	Count [Work Items In Progress]	>=0

Issue at a Glance Trend

The Issue at a Glance Trend dossier of SDA enables you to analyze work items assigned for every sprint, assignees with the most work items, time taken to resolve, and provides a monthly trend of created work items.

You can view the following reports from the Issue at a Glance dossier:

- **Issue Count by Sprint** — Provides the count of work items in each sprint with the colors representing the status of the work items.
- **Time to Resolve by Priority** — Displays the average duration taken by work items to move from the Created state to Resolved state, categorized based on Priority.
- **Assignee with Most Issues** — Provides an overall view of the number of work items assigned to a person. The report displays both In Progress work items and Created work items, and is displayed as a Bubble chart with each bubble representing an assignee and the size indicating the number of In Progress work items.
- **Issue Trend vs Time to Resolve** — Displays a trend chart to show you the trend between the number of work items created in each month and the average time taken to resolve a work item.

Metrics Used

Metric Name	Description	Formula	Expected Value
Avg Duration Created to Completed (Days)	Average number of days from the time the work item was created to it being completed. The value of this metric is blank if the work item is not yet completed	$\frac{[\text{Duration Created to Completed (days)}]}{[\text{Completed Work Items}]}$	>0, Closer to 0 is ideal
Avg Duration Created to Resolved (Days)	Average number of days from the time the work item was created to it being resolved. The value of this metric is blank if the work item is not yet resolved	$\frac{[\text{Duration Created to Resolved (days)}]}{[\text{Resolved Work Items}]}$	>0, Closer to 0 is ideal
Created Work Items	Count of all work items that are created.	Count [Work Items Created]	>=0
In Progress Work	Count of all work items whose current	Count [Work Items In	>=0

Metric Name	Description	Formula	Expected Value
Items	status category is "In Progress"	Progress]	

Story Points

The Story Points dashboard in the SDA Dossier enables you to analyze work items with respect to their story points. You can view details of work items created in each sprint categorized by the story points assigned, count of work items created in each sprint, and so on.

You can view the following reports from the Story Points dashboard:

- **Issue Count by Project** — Displays a count of created work items categorized by project and the average duration taken by work items to move from Created state to Resolved state.
- **Story Points vs Bug** — Displays information about each sprint, such as the story points assigned to work items, created work items, count of assignees, and average story points for each assignee.
- **Issue Details** — Provides details about work items in a tabular format. You can view details such as Work Item Number, Summary, Assigned To, Work Item Type, and Avg Cycle Time.

Metrics Used

Metric Name	Description	Formula	Expected Value
Avg Cycle Time (Days)	Average number of days since the work item first moved to the IN PROGRESS until it is COMPLETED. If the work item is completed, the value is the difference between In Progress Date and the Completed Date else the value is the difference between In Progress Date and the current time	Age Since In Progress (in days) / [Created work items - Proposed work items]	0 or >0
Avg Duration Created to Resolved (Days)	Average number of days from the time the work item was created to it being resolved. The value of this metric is blank if the work item is not yet resolved	[Duration Created to Resolved (days)] / [Resolved Work Items]	>0, Closer to 0 is ideal
Created Work Items	Count of all work items that are created.	Count [Work Items Created]	>=0
Story Points	Story points assigned to the work item.	Sum (Story Points)	>0

SDA Work Item Burn Down Dashboard

The Work Item Burn Down dashboard in the SDA Dossier Reports enables you to analyze work item burn down to understand how work items are progressing through any given sprint. You can also use this dashboard to predict the likelihood of work items being resolved, spill over work items, and so on.

You can view the following types of Burn Down charts:

- **Work Item Burn Down** — The Work Item Burn Down page displays a line graph to depict the current sprint work item burn down. You can select the sprint/iteration for which you want to see the burn down graph. The graph in Visualization 1 is then automatically refreshed to display graph for the selected sprint. Visualization 2 displays a table with data such as the work item number, event type, and remaining work items.
- **Story Points Burn Down** — The Story Points Burn Down page displays a line graph to depict the current sprint story points burn down. Visualization 2 displays a table with data such as the work item number, event type, and remaining story points.
- **Business Value Burn Down** — The Business Value Burn Down page displays a line graph to depict the current sprint business value burn down. Visualization 2 displays a table with data such as the work item number, event type, and remaining business value.
- **Estimate Burn Down** — The Estimate Burn Down page displays a line graph to depict the current sprint estimate burn down. Visualization 2 displays a table with data such as the work item number, event type, and remaining estimate value.

Introduction to SDA dossiers

Numerify dossiers are pre-built, cached datasets that you can use to create visually appealing reports. Use this section to learn how to use the dossiers provided by the Numerify360 for IT application. You can also learn more about generating dynamic, actionable reports.

SDA offers the following dossiers:

- [CI Build dossier](#)
- [Time Spent dossier](#)
- [Work Item dossier](#)
- [Work Item Affected Version dossier](#)
- [Work Item Burn Down dossier](#)
- [Work Item Component dossier](#)
- [Work Item Fix Version dossier](#)
- [Work Item Iteration dossier](#)
- [Work Item Keyword dossier](#)
- [Work Item Label dossier](#)
- [Work Item Project rollup dossier](#)
- [Work Item Release rollup dossier](#)
- [Work Item Snapshot Monthly dossier](#)
- [Work Item Snapshot Weekly dossier](#)
- [Work Item State Change dossier](#)

Dossier Features

You can use the following sections to get the basic usage related information about the dossiers.

Validity

Dossiers contain data for the past one year. Therefore, you can use a dossier to answer queries pertaining to the last one year.

Refresh Rate

New data is loaded into the dossier with each refresh. The refresh rate for dossier is once every day.

Data Granularity

The following attributes in dossiers are captured to the following lowest dimensional level:

- Category, till the Sub Category level
- Department
- Employee

Time Granularity

You can analyze the dossier details across the following time dimensions in the increasing order of hierarchy:

- Hour
- Day
- Week
- Month
- Quarter
- Year

CI Build Dossier

CI Build dossier enables you to create ad-hoc reports that help you to track the status of your software development builds, jobs, tests, and analyze the success or failure of builds. This dossier generates reports to view success or failure of a build lets you analyze the reason for build failure.

Attributes

Expand this link to view the list of attributes available as part of the CI Build dossier:

Attributes	Description
Build Complete On	The date on which the build was completed
Build Complete Time	The time at which the build was completed
Build ID	The ID generated by the CI Server to identify a specific build. Project Plan Name and Build Number together uniquely identify each build
Build Number	The number generated by the CI Server to identify a specific build. Project Plan Name and Build Number together uniquely identify each build
Build Result Status	The status of the build upon completion. The result will be a value from a defined list of values —SUCCESS, FAILURE, UNSTABLE, ABORTED
Build Start On	The date on which the build started
Build Start Time	The time at which the build started
Build Type	A list of values to select the type of build
Buildable Flag (Y/N)	Flag to indicate if the job is active or disabled
Calendar Date	Gregorian calendar date displayed in the format 'M/D/YYYY'
Calendar Month	Gregorian calendar month displayed in the format 'Mmm YYYY'
Calendar Quarter	Gregorian calendar quarter displayed in the format 'Q# YYYY'
Calendar Week	Gregorian calendar week displayed in the format 'Mmm W#'
Calendar Year	Gregorian calendar year displayed in the format 'YYYY'
Job Description	A brief description about the type of job
Job Last Build	Job name and job start date of the Last Build
Job Last Completed Build	Job name and job start date of the last completed build

Attributes	Description
Job Last Failed Build	Job name and Job Start Date of the last Failed Build
Job Last Stable Build	Job name and Job Start Date of the last Stable Build
Job Last Successful Build	Job name and Job Start Date of the last Successful Build
Job Last Unstable Build	Job name and Job Start Date of the last Unstable Build
Job Last Unsuccessful Build	Job name and Job Start Date of the last Unsuccessful Build
Job Name	Name of the job
Job Type	A list of values to select the type of job
Job URL	Link to the job

Metrics

Expand this link to view the list of metrics available as part of the CI Build dossier:

Metric Name	Description	Formula	Expected Value
Actual Build Duration (Secs)	Amount of time (in seconds) taken by a build to complete	Sum(Actual Duration (Secs))	>0
Avg Attempted Build	Average number of build attempted based on Build Count	$\frac{([Build\ Count] - [Successful\ Builds])}{[Build\ Count]}$	>0
Avg Successful Build	Average number of successful builds	$\frac{[Successful\ Builds]}{[Build\ Count]}$	>0, Closer to Build Count value is ideal
Build Count	Count of all builds	Count([Build Count])	>0
Build Stability Score %	Percentage of successful builds which are part of a job	$\frac{[Successful\ Builds]}{[Build\ Count]}$	>0%, Closer to 100% is

Metric Name	Description	Formula	Expected Value
		Count]	ideal
Estimated Build Duration (Secs)	Amount of time (seconds) estimated for a build to complete	Min ([estimated duration])	>0
Tests Failed	The number of test cases that failed for a job build. The value reported is a roll-up or aggregate of all child builds.	Sum ([automated test fail count]) {~}	>=0, Closer to 0 is ideal
Tests Failed %	Percentage of test cases that failed for a job build. The calculation includes test cases from child jobs.	[automated test fail count] / [automated test total count]	>=0%, Closer to 0% is ideal
Tests Passed	The number of test cases that were successful for a job build. The value reported is a roll-up/aggregate of all child builds.	Sum ([automated test pass count]) {~}	>=0
Tests Passed %	Percentage of test cases that were successful for a job build. The calculation includes test cases from child jobs.	[automated test pass count] / [automated test total count]	>0%, Closer to 100% is ideal
Tests Skipped	The number of test cases skipped (not run) for a job build. The value reported is a roll-up/aggregate of all child builds.	Sum ([automated test skip count]) {~}	>=0
Tests Skipped %	Percentage of test cases skipped (not run) for a job build. The calculation includes test cases from child jobs.	[automated test skip count] / [automated test total count]	>=0%, Closer to 0% is ideal

Metric Name	Description	Formula	Expected Value
Tests Total	The total number of test cases for a job build (sum of Tests Passed, Failed and Skipped). The value reported is a roll-up/aggregate of all child builds.	Sum ([automated test total count]) {~}	>=0

Time Spent dossier

Time Spent dossier enables you to create ad-hoc reports that help you analyze work items based on the time spent on working on it. Using the Time Spent dossier, Project Managers can analyze how much time was spent by a particular resource on a given work item. It also helps in tracking total time spent by individual resources across all work items.

Attributes

Expand this link to view the list of attributes available as part of the Time Spent dossier.

Attributes	Description
Completed DateTime	Date and time when the work item was last closed, or was set to Closed status
Created DateTime	Date and time when the work item was created
Date	Date on which the status of the work item moved to Created, In Progress, Resolved, or Completed
Employee	Name of the employee
In Progress DateTime	Date and time when the work item first moved to the In Progress status category
Iteration	Iteration is the iteration in which the time spent was updated.
Multiple Assignment Flag	Indicates whether the work item has ever been assigned to more than one user
Priority	Priority of the work item
Project	Project to which the work item is associated
Resolved DateTime	Date and time when the work item was resolved
Status	Status of the work item as mentioned in the source
Status Category	Current status category of the work item. Status category is a standardized set of statuses across workflows such as Proposed, In Progress, Resolved, and Completed
Story Points	Story points assigned to the work item. Story point is a standard method used by Agile teams to measure the difficulty or effort (in terms of man hours) involved in implementing a story by giving it points.

Attributes	Description
Time Spent	Amount of time spent on a work item as updated by the user
Time Spent Update DateTime	Date and time at which the Time Spent field was updated
Time Spent Updated By	User who last updated the Time Spent field on the work item
Total Time Spent Updates	Number of times the Time Spent field has been updated
Version	Fix Version to which the work item is associated
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Number	Unique identifier for the work item
Work Item Type	Type of work item. For example, Epic, Story, Improvement, Bug, and so on

Metrics

Expand this link to view the list of metrics available as part of the Time Spent dossier.

Metric Name	Description	Formula	Expected Value
Avg Time Spent by Non-Assigned To	Average time spent on the work item by people who are not the assignees	Time spent by Non-assigned To (Hours)/Count of Non-assignees	NA
Count of Time Spent Updates	Number of times the Time Spent field was updated	Count([Count of Time Spent Updates])	NA
Count of Time Spent Updates by Assignee	Number of times the Time Spent field was updated by assignees	Count([Count of Time Spent Updates]) where Assignee flag= 'Y'	NA
Count of Time Spent Updates by Non-Assignee	Number of times the Time Spent field was updated by non-assignees	Count([Count of Time Spent Updates]) where Assignee flag= 'N'	NA
Count of Time Spent Updates by Reporter	Number of times the Time Spent field was updated by the person who reported the work item	Count([Count of Time Spent Updates]) where Reporter flag= 'Y'	NA

Metric Name	Description	Formula	Expected Value
Time Spent (Hours)	Total time spent on the work item	Sum(Time Spent Sec)/3600.0	NA
Time Spent by Assigned To (Hours)	Total time spent on the work item by assignees	Sum(Time Spent Sec)/3600.0 where Assignee flag= 'Y'	NA
Time Spent by Non-Assigned To (Hours)	Total time spent on the work item by non-assignees	Sum(Time Spent Sec)/3600.0 where Assignee flag= 'N'	

Work Item dossier

Work Item dossier enables you to create ad-hoc reports that help you analyze your work items on the basis of different attributes.

Attributes

Expand this link to view the attributes available as part of the Work Item self-service dossier

Attributes	Description
Assigned To	User responsible for working on the Work Item
Calendar Date	Gregorian calendar date displayed in the format 'M/D/YYYY'
Calendar Month	Gregorian calendar month displayed in the format 'Mon YYYY'
Calendar Quarter	Gregorian calendar quarter displayed in the format 'Q# YYYY'
Calendar Week	Gregorian calendar week displaying the week number. For example, W21, W22.
Calendar Year	Gregorian calendar year displayed in the format YYYY
Cancelled By	Person who canceled the work item.
Cancelled DateTime	Date and time when the work item was canceled.
Completed By	Person who completed the work item.
Completed DateTime	Date and time when the Work Item was last closed, or was set to 'Closed' status
Component	Component to which the work item is associated. This attribute will have a valid value only when there is a single component associated to the work item. If more than one component is specified for the work item, the value will default to 'Multiple'. If no component is specified, the value will default to 'Unspecified'
Created By	Person who created the work item
Created DateTime	Date and time when the Work Item was created
Current Estimate	Remaining estimate updated in the work item when the work item is 'In Progress'
Date	Date on which the status of the Work Item moved to 'Created', 'In Progress', 'Resolved', or 'Completed'
Day of Month	Day of month between 1 and 31

Attributes	Description
Day of Week	Day of week
Day of Year	Day of the year between 1 to 366
Description	Short description about the work item.
Due Date	Date by when the Work Item is scheduled for completion.
Earliest Fix Version	Version to which the selected work item is associated as 'Fix Version'
Employee	Name of the employee
Environment	Details of the environment on which the user is working for the work item
Epic	Epic number to which the work item is linked
Epic Name	Name of the epic to which the work item is linked
Fix Version Release DateTime	Date and time of release of version in which the work item was addressed
In Progress DateTime	Date and time when the Work Item first moved to the 'In Progress' status category
In Progress Flag	Indicates whether the Work Item is currently in the 'In Progress' status category
Iteration Count	Iteration or Sprint to which the Work Item is associated. If a work item is associated with more than one iteration, only the latest iteration will be considered
Lagging Count of Days	Count of number of days since the first data record till current day
Lagging Count of Months	Count of number of months since the first data record till current month
Lagging Count of Quarters	Count of number of quarters since the first data record till current quarter
Lagging Count of Weeks	Count of number of weeks since the first data record till current week
Lagging Count of Years	Count of number of years since the first data record till current year
Last Iteration	The last sprint (iteration) to which the work item is associated with.
Last Iteration Actual End DateTime	Date and time when the last iteration was closed
Last Iteration Planned End DateTime	Date and time when the last iteration was expected to end
Last Iteration Start DateTime	Date and time when the last iteration began
Multiple Assignment Flag	Indicates whether the Work Item has ever been assigned to more than

Attributes	Description
	one user
Original Estimate	Original estimate mentioned in the Work Item
Overdue Flag	Indicates whether the Work Item is overdue (Current date is past the due date and the status category is less than 'Resolved')
Priority	Priority of the Work Item
Priority De-escalated Flag	Indicates whether the current priority of the Work Item is lower than the original priority
Priority Escalated Flag	Indicates whether the current priority of the Work Item is higher than the original priority
Project	Project to which the Work Item is associated
Project Category	Current category of the project.
Project Classification	The type of project the current project has been classified under
Proposed Flag	Indicates whether the Work Item is currently in the 'Proposed' status category
Reason	Reason for closing the work item
Reopened Flag	Indicates whether the Work Item has ever been reopened
Reported By	User who reported the Work Item or is affected by the work item
Resolution Type	A description of the resolution carried out for the Work Item. This field will only have a value once the work item reaches the Resolved or Completed status category
Resolved By	Person who resolved the work item.
Resolved DateTime	Date and time when the Work Item was last Resolved
Risk	Risk associated with the work item
Severity	Severity of the work item
Status (Source)	Status of the work item as mentioned in the source
Status (Standardized)	Status of the work item as per standardization within Numerify
Status Category (Source)	Current status category of the Work Item. Status category is a standardized set of statuses across work flows such as Proposed, In Progress, Resolved, and Completed
Story Points	Story points assigned to the work item. Story point is a standard method used by Agile teams to measure the

Attributes	Description
	difficulty involved in implementing a story by giving it points.
Summary	Title or brief summary about the Work Item
Time Spent	Amount of time spent on the Work Item
Updated By	Person who last made changes to the work item
Updated DateTime	Date and time when the work item was changed
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Level 1	Work Item which is one level above the lowest level in the hierarchy is shown in this level
Work Item Level 2	Work Item which is two levels above the lowest level in the hierarchy is shown in this level
Work Item Level 3	Work Item which is three levels above the lowest level in the hierarchy is shown in this level
Work Item Level 4	Work Item which is four levels above the lowest level in the hierarchy is shown in this level
Work Item Level 5	Work Item which is highest in the hierarchy is shown in this level
Work Item Link Type	Indicates the link the work item has with the parent work item (For example, is implemented by, is resolved by, implements, and so on)
Work Item Number	Unique identifier for the Work Item
Work Item Type (Source)	Type of work item. For example, Epic, Story, Improvement, Bug, and so on

Metrics

Expand this link to view a list of all the metrics available as part of the Work Item self-service dossier

Metric Name	Description	Formula	Expected Value
% Work Items without Current estimate	Percentage of work items which don't have any Current Estimate defined	$\frac{(((\text{InProgress Without Current Estimate}] + [\text{Completed Without Current Estimate}]) + [\text{Resolved Without Current Estimate}])}{([\text{In Progress}] + [\text{Completed}] + [\text{Resolved}])}$	>=0, 0 is ideal

Metric Name	Description	Formula	Expected Value
		Work Items] + [Completed Work Items]) + [Resolved Work Items]))	
% Work Items without Original estimate	Percentage of work items which don't have any Original Estimate defined	$\frac{([InProgress Without Original Estimate] + [Completed Without Original Estimate]) + [Resolved Without Original Estimate]}{([In Progress Work Items] + [Completed Work Items]) + [Resolved Work Items])}$	≥ 0 , 0 is ideal
% Work Items without Story Point	Percentage of work items which don't have any Story Points defined	$\frac{\text{Count of work item without story points (In Progress + Resolved + Completed work items)}}{(\text{In Progress + Resolved + Completed work items})}$	≥ 0 , 0 is ideal
% Work Items without Time Spent	Percentage of work items which don't have any Time Spent defined	$\frac{\text{Count of work item without time Spent}}{(\text{In Progress + Resolved + Completed work items})}$	≥ 0
Avg Cycle Time (Days)	<p>Average number of days since the work item first moved to the IN PROGRESS until it is COMPLETED.</p> <p>If the work item is completed, the value is the difference between In Progress Date and the Completed Date else the value is the difference between In Progress Date and the</p>	<p>Age Since In Progress (in days) / [Created work items - Proposed work items]</p>	0 or >0

Metric Name	Description	Formula	Expected Value
	current time		
Avg Days Since Last Update	<p>Average number of days since the work item was last updated.</p> <p>This metric is only applicable to work items that are not COMPLETED.</p>	$\frac{\text{(Days Since Last Update)}}{\text{(Current Open Work Items)}}$	>0
Avg Duration Created to Cancelled (Days)	<p>Average number of days from the time the work item was created to it being canceled.</p>	$\frac{\text{[Duration Created to Cancelled (days)]}}{\text{[Cancelled Work Items]}}$	>=0
Avg Duration Created to Completed (Days)	<p>Average number of days from the time the work item was created to it being completed.</p> <p>The value of this metric is blank if the work item is not yet completed</p>	$\frac{\text{[Duration Created to Completed (days)]}}{\text{[Completed Work Items]}}$	>0, Closer to 0 is ideal
Avg Duration Created to Resolved (Days)	<p>Average number of days from the time the work item was created to it being resolved.</p> <p>The value of this metric is blank if the work item is not yet resolved</p>	$\frac{\text{[Duration Created to Resolved (days)]}}{\text{[Resolved Work Items]}}$	>0, Closer to 0 is ideal
Avg Duration In Progress to Completed (Days)	<p>Average number of days from the first time the work item moved to the In Progress state to it being completed.</p> <p>The value of this metric is blank if the work item is not yet completed</p>	$\frac{\text{[Duration InProgress to Completed (days)]}}{\text{[Completed Work Items]}}$	>0, Closer to 0 is ideal

Metric Name	Description	Formula	Expected Value
Avg Duration In Progress to Resolved (Days)	Average number of days from the first time the work item moved to the In Progress state to it being resolved. The value of this metric is blank if the work item is not yet resolved	$\frac{[\text{Duration InProgress to Resolved (days)}]}{[\text{Resolved Work Items}]}$	>0, Closer to 0 is ideal
Avg Duration In Progress to Cancelled (Days)	Average number of days from the first time the work item moved to the In Progress state to it being canceled.	$\frac{[\text{Duration InProgress to Cancelled (days)}]}{[\text{Cancelled Work Items}]}$	>=0, Closer to 0 is ideal
Avg Lead Time (Days)	Average number of days from the time the work item was created until it is completed. If the work item is completed, the value is the difference between Created Date and Completed Date else the value is the difference between Created Date and the current time	$\frac{\text{Sum [Age Since Creation]}}{[\text{Created Work Items}]}$	>0
Avg No. of Bugs per User Story	Total number of Bugs/ Number of User Stories	$\frac{[\text{No. of Bugs}]}{[\text{No. of User Stories}]}$	>=0
Avg No. of Stories Linked per Epic	Total number Linked Stories/ Total Epics	$\frac{[\text{No. of Linked Stories}]}{[\text{No. of Epics}]}$	>=0
Avg No. of Story Points per Epic	Total of story points of linked stories/ Number of Epics	$\frac{[\text{Total Story Points of Linked Stories}]}{[\text{No. of Epics}]}$	>=0
Avg No. of Sub-Tasks per Task	Total Number of Sub-tasks/ Total Number of	$\frac{[\text{No. of Sub-Tasks}]}{[\text{Created Work Items}]}$	>=0

Metric Name	Description	Formula	Expected Value
	tasks		
Avg No. of Tasks per User Story	Total Number of Linked Tasks/ Total User Stories	[No. of Linked Tasks] / [No. of User Stories]	>=0
Avg Weight of Task	Total of story points/ Total number of tasks	[Story Points] / [Created Work Items]	>=0
Cancelled Work Items	Count of all work items whose current status category is "Cancelled"	Count [Cancelled Work Items]	0 is ideal
Completed Work Items	Count of all work items whose current status category is "Completed"	Count [Work Items Completed]	>=0
Created Work Items	Count of all work items that are created.	Count [Work Items Created]	>=0
Current Estimate - Completed (Hours)	Current estimated time required to complete the work item. The unit of measure is based on how estimates are configured in the source system (hours, story points). Work items are evaluated based on their completed dates	Sum [Current Estimate Completed]	>0, Closer to 0 is ideal
Current Estimate - Created (Hours)	Current estimated time required to complete the work item. The unit of measure is based on how estimates are configured in the source system (hours, story points). Work items are evaluated	Sum [Current Estimate Opened]	>0

Metric Name	Description	Formula	Expected Value
	based on their created dates		
Days Until Due Date	Total number of days until the work item is due to be completed.	Sum [Days Until Due Date]	Closer to 0 is ideal
In Progress Work Items	Count of all work items whose current status category is "In Progress"	Count [Work Items In Progress]	>=0
Iteration Count	Number of iterations (sprints) a work item has been through.	Sum [Iteration Count]	>=0
No. of Bugs Without User Story	Count of Bugs not linked to User story	Count ([Created Work Items]) where Orphan Bug Flag = Y	>=0, 0 is ideal
No. of Invalid Bugs	Count of Bugs marked as Invalid	Count ([Cancelled Work Items]) where Work Item Type = Bug	>=0, 0 is ideal
No. of Resolved Bugs With Re-prioritization	Count of Resolved Bugs with Prioritization different from the original Prioritization	Count ([Resolved Work Items]) where (Work Item Type = Bug and Reprioritization Flag = Y)	>=0, 0 is ideal
No. of Work Items Missing Fixed Version	Count of all the work items marked as completed where the fixed version is missing	Count ([Completed Work Items]) where Work Item Fix Version = 'UNKNOWN' or 'UNSPECIFIED'	>=0, 0 is ideal
Open Work Items	Number of work items in the backlog (number of work items in 'Open' state)	Count [Created Work Items] where status is Proposed or In Progress	>=0
Original Estimate - Completed (Hours)	Original estimated time required to complete the work item.	Sum [Original Estimate Completed]	>0

Metric Name	Description	Formula	Expected Value
	The unit of measure is based on how estimates are configured in the source system (hours, story points). Work items are evaluated based on their completed dates		
Original Estimate - Created (Hours)	Original estimated time required to complete the work item. The unit of measure is based on how estimates are configured in the source system (hours, story points). Work items are evaluated based on their created dates	Sum [Original Estimate Opened]	>0, Closer to 0 is ideal
Orphan User Stories	Number of User story which are not linked to an Epic or another User Story	Count ([Created Work Items]) where Work Item Orphan Story Flag = Y	>=0, 0 is ideal
Orphan Work Items	Number of work items which are not linked to any other work item	Count ([Created Work Items]) where Work Item Orphan Flag = Y	>=0, 0 is ideal
Overdue Work Items	Count of all work items that are past their due date (current date is past the due date and the status category is less than "Resolved")	Count [Work Items Created] WHERE Overdue Flag (ID) = Y	Closer to 0 is ideal
Priority De-escalated Work Items	Count of work items whose current priority is lower than the original	Count [Work Items Created] WHERE Priority De-escalated Flag (ID) = Y	Closer to 0 is ideal

Metric Name	Description	Formula	Expected Value
	priority		
Priority Escalated Work Items	Count of work items whose current priority is higher than the original priority	Count [Work Items Created] WHERE Priority Escalated Flag (ID) = Y	Closer to 0 is ideal
Proposed Work Items	Count of all work items whose current status category is "Proposed"	Count (Created Work Items) WHERE Work Item Proposed Flag (ID) = 'Y'	0 or >0
Re-prioritization Count	Count of the number of times 'Priority' is changed for a work item	Sum [Re prioritization count]	Closer to 0 is ideal
Reassignment Count	Total number of times a work item has been reassigned	Sum [Reassignment Count]	Closer to 0 is ideal
Reopened Count	Total number of times a work item has been reopened (Status changes from 'Closed' to an earlier status)	Sum [Work Items Created] WHERE Reopened Flag (ID) = Y	Closer to 0 is ideal
Reopened Work Items	Total number of work items that have been reopened (Status category changes from "Resolved" or "Closed" to an earlier status)	Sum [Reopened Count] Where Reopened Flag (ID) = Y	Closer to 0 is ideal
Resolved Work Items	Count of all work items whose current status category is "Resolved"	Count [Work Items Resolved]	>=0
Story Points	Story points assigned to the work item.	Sum (Story Points)	>0
Time Spent – Completed (Hours)	Actual amount of time required to resolved or close the work item.	Sum [Time Spent Completed]	Closer to 0 is ideal

Metric Name	Description	Formula	Expected Value
	This metric is applicable only for resolved or closed work items. Work items are evaluated based on their completed date		
Time Spent – Created (Hours)	<p>Actual amount of time required to resolved or close the work item.</p> <p>This metric is applicable only for resolved or closed work items. Work items are evaluated based on their created date</p>	Sum [Time Spent Opened]	Closer to 0 is ideal
Votes Count	Total number of votes received by the work item	Sum [Votes]	0 or >0
Work Items Completed Without InProgress	Count of Completed work items which was not moved to InProgress	Count ([Completed Work Items]) where Work Item Not Moved to InProgress Flag = N	Closer to 0 is ideal

Work Item Affected Version dossier

Work Item Affected Version dossier enables you to perform ad-hoc analysis of the work items based on the affected version. Using this dossier, you can extract data on all the versions of a software affected by a particular work item. You can also filter issues linked to a single affected version.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Affected Version dossier:

Attributes	Description
Affected Version	All version(s) of the software affected by the work item
Assigned To	User responsible for working on the Work Item
Priority	Priority of the Work Item
Status	Current status of the work item within the workflow
Type	Type of work item. For example, Epic, Story, Improvement, Bug, and so on
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Created DateTime	Date and time when the Work Item was created
Work Item Number	Unique identifier for the Work Item

Metrics

Expand this link to view the list of metrics available as part of the Work Item Affected Version dossier:

Metric Name	Description	Formula	Expected Value
Affected Version Count	Count of all versions affected by a particular work item.	Max (Affected Version Count)	> or = 0
Work Item Count	Count of all work items associated with a specific affected version.	Max (Work Item Count From Affected Version)	> or = 0

Work Item Burn Down dossier

Work Item Burn Down dossier enables you to create reports to track team velocity in a given iteration. Using this dossier, you can create graphs to track the number of work items left to be addressed at the end of an iteration.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Burn Down dossier:

Attributes	Description
Calendar Date	Gregorian calendar date displayed in the format 'M/D/YYYY'
Calendar Month	Gregorian calendar month displayed in the format 'Mon YYYY'
Calendar Quarter	Gregorian calendar quarter displayed in the format 'Q# YYYY'
Calendar Week	Gregorian calendar week displaying the week number. For example, W21, W22.
Calendar Year	Gregorian calendar year displayed in the format YYYY
Date	Date on which the status of the Work Item moved to 'Created', 'In Progress', 'Resolved', or 'Completed'
Day of Month	Day of month between 1 and 31
Day of Week	Day of week
Day of Year	Day of the year between 1 to 366
Lagging Count of Days	Count of number of days since the first data record till current day
Lagging Count of Iteration	Count of number of iterations since the first data record till current iteration
Lagging Count of Months	Count of number of months since the first data record till current month
Lagging Count of Quarters	Count of number of quarters since the first data record till current quarter
Lagging Count of Weeks	Count of number of weeks since the first data record till current week
Lagging Count of Years	Count of number of years since the first data record till current year
Last Iteration Actual End DateTime	Date and time when the last iteration was closed
Last Iteration Planned End DateTime	Date and time when the last iteration was expected to end

Attributes	Description
Last Iteration Start DateTime	Date and time when the last iteration began
Project	Project to which the Work Item is associated
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Iteration	Iteration to which this work item is associated
Work Item Number	Unique identifier for the Work Item

Metrics

Expand this link to view the list of metrics available as part of the Work Item Burn Down dossier:

Metric Name	Description	Formula	Expected Value
business value added	Business value of the work item which is added to the Iteration after iteration has started	Sum ([business value added])	0 or >0
business value removed	Business value of the work item which is removed during the iteration	Sum ([business value removed])	0 or >0
business value reopened	Business value of the work item which is reopened during the iteration	Sum ([business value reopened])	0 or >0
business value resolved	Business value of the work item which is resolved during the iteration	Sum ([business value resolved])	0 or >0
estimate added	Estimate of the work Item which is added to the Iteration after iteration has started	Sum ([estimate added])	0 or >0
estimate removed	Estimate of the work Item which is removed during the iteration	Sum ([estimate removed])	0 or >0

Metric Name	Description	Formula	Expected Value
estimate reopened	Estimate of the work Item which is reopened during the iteration	Sum ([estimate reopened])	0 or >0
estimate resolved	Estimate of the work Item which is resolved during the iteration	Sum ([estimate resolved])	0 or >0
is added count	Count of work Item which is added to the Iteration after iteration has started	Sum([is added count]){~+}	0 or >0
is removed count	Count of work Item which is removed during the iteration	Sum([is removed count])	0 or >0
is reopened count	Count of work Item which is reopened during the iteration	Sum([is reopened count])	0 or >0
is resolved count	Count of work Item which is resolved during the iteration	Sum([is resolved count])	0 or >0
Remaining Business Value	Business value of work item remaining at the end of each day	Sum ([Remaining Business Value Count])	0 or >0
Remaining Estimate Value	Estimate value of work item remaining at the end of each day	Sum ([Remaining Estimate Count])	0 or >0
Remaining Story Points	Story point of work item remaining at the end of each day	Sum ([Remaining Story Points Count])	0 or >0
Remaining Work Items	Count of work item remaining at the end of each day	Sum ([Remaining Work Item	0 or >0

Metric Name	Description	Formula	Expected Value
		Count])	
story points added	Story Point of the work Item which is added to the Iteration after iteration has started	Sum([story points added])	0 or >0
story points removed	Story Point of the work Item which is removed during the iteration	Sum([story points removed])	0 or >0
story points reopened	Story Point of the work Item which is reopened during the iteration	Sum([story points reopened])	0 or >0
story points resolved	Story Point of the work Item which is resolved during the iteration	Sum([story points resolved])	0 or >0

Work Item Component dossier

Work Item Component dossier enables you to track the progress of work item component as an iCube. You can use this dossier to understand the number of components that affect a particular issue and gain valuable insight into the number of issues that are linked to a single component.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Component dossier:

Attributes	Description
Assigned To	User responsible for working on the Work Item
Component	Component to which the work item is associated. This attribute will have a valid value only when there is a single component associated to the work item. If more than one component is specified for the work item, the value will default to 'Multiple'. If no component is specified, the value will default to 'Unspecified'
Priority	Priority of the Work Item
Status	Current status of the work item within the workflow
Type	Type of work item. For example, Epic, Story, Improvement, Bug, and so on
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Number	Unique identifier for the Work Item

Metrics

Expand this link to view the list of metrics available as part of the Work Item Component dossier:

Metric Name	Description	Formula	Expected Value
Component Count	Count of all components assigned to a particular work item	Max (Component Count)	> or = 0
Work Item Count	Count of work items associated with a particular component	Max (Work Item Count From Component)	> or = 0

Work Item Fix Version dossier

Work Item Fix Version dossier enables you to perform ad-hoc analysis of the work items based on the version in which they are addressed. Using this dossier, you can extract data on all the versions of a software in which a particular work item has been fixed. You can also filter issues linked to a single fix version.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Fix Version dossier:

Attributes	Description
Fix Version	Release version in which the Work Item is expected to be fixed
Last Iteration	Iteration or Sprint to which the Work Item is associated. If a work item is associated with more than one iteration, only the latest iteration will be considered
Priority	Priority of the Work Item
Reason	Reason for closing the work item
Resolved By	Person who resolved the work item.
Resolved DateTime	Date and time when the Work Item was last resolved, or was set to 'Resolved' status
Status	Current status of the work item within the workflow
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Number	Unique identifier for the Work Item

Metrics

Expand this link to view the list of metrics available as part of the Work Item Fix Version dossier:

Metric Name	Description	Formula	Expected Value
Fix Version Count	Count of all versions in which a particular work item is fixed.	Max (Fix Version Count)	> or = 0
Work Item Count	Count of all work items associated with a specific fix version.	Max (Work Item Count From Fix Version)	> or = 0

Work Item Iteration dossier

Work Item Iteration dossier enables Project Managers to perform ad-hoc analysis of the number of iterations that a particular work item was part of and the number of work items assigned to a particular iteration. You can use this dossier to create reports that help in analyzing your iterations based on the number of work items being handled and vice-versa.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Iteration dossier

Attributes	Description
Earliest Fix Version	Version to which the selected work item is associated as 'Fix Version'
Iteration	Iteration to which this work item is associated
Iteration Actual End Date	Date on which the iteration was closed
Iteration Planned End Date	Date on which the iteration is expected to end
Iteration Start Date	Date on which the iteration started
Lagging Count of Iteration	Count of number of iterations since the first data record till current iteration
Priority	Priority of the work item
Project	Project to which the Work Item is associated
Resolved By	Name of the person who resolved the work item
Resolved DateTime	Date and time at which the work item was resolved
Status	Status of the work item recorded for the specific status transition
Work Item	Name of the work item; this attribute always has an ID associated to it
Work Item Number	Name or number associated with a work item; this attribute enables the user to drill down to the source record

Metrics

Expand this link to view the list of metrics available as part of the Work Item Iteration dossier:

Metric Name	Description	Formula	Expected Value
Iteration Count	Count of iterations	Max (Iteration	1 or closer to 1

Metric Name	Description	Formula	Expected Value
	associated with a particular work item	Count from Iteration Fact)	is ideal
Work Item Count	Count of work items associated with a particular iteration	Max (Work Item Count From Iteration)	≥ 0

Work Item Keyword dossier

Work Item Keyword dossier enables you to create ad-hoc reports that help you analyze work items based on certain keywords. Generally, at the time of creation of a work item, users add a brief description or summary that explains the work item. The Work Item Keyword dossier uses this information, runs filters to leave out irrelevant data and generates reports that help you analyze your work item based on these keywords.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Keyword dossier:

Attributes	Description
Assigned To	User responsible for working on the work item
Completed DateTime	Date and time when the work item was last closed, or was set to Closed status
Created By	Person who created the work item
Created DateTime	Date and time when the work item was created
Description	Short description about the work item
Due Date	Date by when the work item is scheduled for completion
Earliest Fix Version	Version to which the selected work item is associated as Fix Version
In Progress DateTime	Date and time when the work item first moved to the In Progress status category
Keyword	Keywords available as part of the text in the corresponding field after eliminating the noise words
Keyword Text Type	This field provides breakup of occurrence of a particular keyword across different fields
Last Iteration	The last sprint (iteration) to which the work item is associated with
Primary Component	Primary components to which this work item is associated
Priority	Priority of the work item
Reported By	User who reported on the work item or is affected by the work item
Resolution	A description of the resolution carried out for the work item.

Attributes	Description
	This field displays a value only after the work item reaches the Resolved or Completed status category
Status	Status of the work item as mentioned in the source system (like JIRA Software Cloud
Status Category	Current status category of the work item. Status category is a standardized set of statuses across workflows such as Proposed, In Progress, Resolved, and Completed
Summary	Title or brief summary about the work item
Type	Type of work item. For example, Epic, Story, Improvement, Bug, and so on
Updated By	Person who last made changes to the work item
Work Item	Work item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Number	Unique identifier for the work item

Metrics

Expand this link to view the list of metrics available as part of the Work Item Keyword dossier:

Metric Name	Description	Formula	Expected Value
Work Item Keyword Occurrence	Total number of occurrences of a keyword across all fields designated for keyword analysis	Sum([Work Item Keyword Occurrence])	NA
Work Item With Keywords	Count of all the work items which have a keyword	Count<Distinct=True>([Work Item with Keyword Fact])	NA

Work Item Label dossier

Work Item Labels dossier enables you to perform ad-hoc analysis of the work items based on the label. Using this dossier, you create reports to understand the number of labels that are linked to a work item and number of work items linked to a single label.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Label dossier.

Attributes	Description
Label	Label to which this work item is associated
Last Iteration	The last sprint (iteration) to which the work item is associated with
Priority	Priority of the work item
Resolved By	Name of the person who resolved the work item
Resolved DateTime	Date and time at which the work item was resolved
Status	Current status of the work item
Work Item	Name of the work item; this attribute always has an ID associated to it
Work Item Number	Name or number associated with a work item; this attribute enables the user to drill down to the source record

Metrics

Expand this link to view the list of metrics available as part of the Work Item Label dossier.

Metric Name	Description	Formula	Expected Value
Labels Count	Count of labels associated to the work Item	Max (Labels Count)	>=1
Work Item Count	Count of work items associated to the Label	Max (Work Item Count From Labels)	>=1

Work Item Project rollup dossier

The Work Item Project rollup dossier enables you to create ad-hoc reports to help you in analyzing the number of work items committed for a project in comparison with the number of work items completed for that project.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Project rollup dossier.

Attributes	Description
Project	Project to which the Work Item is associated
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Iteration	Iteration or Sprint to which the Work Item is associated. If a work item is associated with more than one iteration, only the latest iteration will be considered

Metrics

Expand this link to view the list of metrics available as part of the Work Item Project rollup dossier.

Metric Name	Description	Formula	Expected Value
% Spillover SP	Percentage of story points that have spilled over to the next version of project	$\frac{([Committed\ Velocity] - [Completed\ Velocity])}{[Committed\ Velocity]}$	Closer to 0 is ideal
% WI Spillover	Percentage of work items that have spilled over to the next version of project	$\frac{([Committed\ Count] - [Completed\ Count])}{[Committed\ Count]}$	Closer to 0 is ideal
Added Work	New Stories Added to the project	$[Stories\ Added] / [Committed\ Velocity]$	≥ 0
Committed Count	Count of the story points committed at the beginning of the project	$Sum([Committed\ Count])$	≥ 0
Committed Hours	Number of hours committed at the beginning of the project	$Sum([Committed\ Hours])$	≥ 0

Metric Name	Description	Formula	Expected Value
Committed Tasks	Number of tasks committed at the beginning of the project	Sum([Committed Tasks])	>=0
Committed Velocity	Number of committed work items	Sum([Committed Velocity])	>=0
Completed Count	Count of work items completed at the end of the project	Sum([Completed Count])	>=0
Completed Tasks	Count of tasks completed at the end of the project	Sum([Completed Tasks])	>=0
Completed Velocity	Completed Story Points at the end of project	Sum([Completed Velocity])	>=0
Defect Density	Number of defects fixed out of the total completed velocity	[Defects Fixed] / [Completed Velocity]	>=0
Defects Committed	Number of defects committed for work at the beginning of the project	Sum([Defects Committed])	>=0
Defects Fixed	Number of defects fixed	Sum([Defects Fixed])	>=0
Defects Found	Number of defects found	Sum([Defects Found])	>=0
Stories Added	Number of user stories added to the project	Sum([Stories Added])	>=0
Stories Committed	Number of user stories committed at the beginning of the project	Sum([Stories Committed])	>=0
Stories Completed	Number of user stories completed at the end of the project	Sum([Stories Completed])	>=0
Velocity Variation SP	Variation in the velocity of actual completed story points with respect to committed story points	(Completed Velocity - Committed Velocity) * 100/Committed Velocity	Closer to 0 is ideal

Work Item Release rollup dossier

The Work Item Release rollup dossier enables you to create ad-hoc reports to help you in analyzing the number of work items committed for a release in comparison with the number of work items completed for that release.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Release rollup dossier.

Attributes	Description
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Fix Version	Release version in which the Work Item is expected to be fixed
Work Item Iteration	Iteration or Sprint to which the Work Item is associated. If a work item is associated with more than one iteration, only the latest iteration will be considered

Metrics

Expand this link to view the list of metrics available as part of the Work Item Release rollup dossier.

Metric Name	Description	Formula	Expected Value
% Spillover SP Release	Percentage of story points that have spilled over to the next release	$\frac{[Committed Velocity Release] - [Completed Velocity Release]}{[Committed Velocity Release]}$	Closer to 0 is ideal
% WI Spillover Release	Percentage of work items that have spilled over to the next release	$\frac{[Committed Count Release] - [Completed Count Release]}{[Committed Count Release]}$	Closer to 0 is ideal
Added Work Release	New Stories Added to the release divided by the Committed Velocity(SP)	$\frac{[Stories Added Release]}{[Committed Velocity Release]}$	≥ 0
Committed Count Release	Count of the story points committed at the beginning of the release	$Sum([Committed Count Release])$	≥ 0
Committed Hours Release	Planned estimate(current) at the beginning of an Iteration	$Sum([Committed Hours Release])$	≥ 0

Metric Name	Description	Formula	Expected Value
Committed Tasks Release	Number of work items committed at the beginning of the iteration of type Task	Sum([Committed Tasks Release])	>=0
Committed Velocity Release	Planned story points at the beginning of release	Sum([Committed Velocity Release])	>=0
Completed Count Release	Count of work items completed at the end of the release	Sum([Completed Count Release])	>=0
Completed Tasks Release	Total Time Spent at the end of an Iteration during the Iteration	Sum([Completed Tasks Release])	>=0
Completed Velocity Release	Completed Story Points at the end of Iteration	Sum([Completed Velocity Release])	>=0
Defect Density Release	Number of defects fixed out of the total completed velocity	[Defects Fixed Release] / [Completed Velocity Release]	>=0
Defects Committed Release	Number of defects committed for work at the beginning of the release	Sum([Defects Committed Release])	>=0
Defects Fixed Release	Number of defects fixed in the release	Sum([Defects Fixed Release])	>=0
Defects Found Release	Number of defects found in the release	Sum([Defects Found Release])	>=0
Stories Added Release	Number of user stories added to the release	Sum([Stories Added Release])	>=0
Stories Committed Release	Number of user stories committed at the beginning of the release	Sum([Stories Committed Release])	>=0
Stories Completed Release	Number of user stories completed at the end of the release	Sum([Stories Completed Release])	>=0
Velocity Variation SP Release	Variation in the velocity of actual completed story points with respect to committed story points	$([Completed Velocity Release] - [Committed Velocity Release]) * 100.0 / [Committed Velocity Release]$	Closer to 0 is ideal

Work Item Snapshot Monthly dossier

Work Item Snapshot Monthly dossier enables you to create ad-hoc reports that help you analyze the flow of work items as it progresses through various status categories. Using this dossier, you can chart a month-wise average age report.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Snapshot Monthly dossier.

Attributes	Description
Assigned To	User responsible for working on the Work Item
Calendar Month	Gregorian calendar month displayed in the format 'Mon YYYY'
Created Date	Date on which the Work Item was created
Date	Date on which the status of the Work Item moved to 'Created', 'In Progress', 'Resolved', or 'Completed'
Due Date	Date by when the Work Item is scheduled for completion.
Earliest Fix Version	Version to which the selected work item is associated as 'Fix Version'
In Progress Date	Date on which the Work Item first moved to the 'In Progress' status category
In Progress Flag	Indicates whether the Work Item is currently in the 'In Progress' status category
Last Iteration	The last sprint (iteration) to which the work item is associated with.
Last Updated Date	Date on which the work item was last updated
Overdue Flag	Indicates whether the Work Item is overdue (Current date is past the due date and the status category is less than 'Resolved')
Priority	Priority of the Work Item
Project	Project to which the Work Item is associated
Proposed Flag	Indicates whether the Work Item is currently in the 'Proposed' status category
Reassignment Count	Count of the number of times a work item was reassigned
Reopen Count	Count of the number of times a work item was reopened
Reopened Flag	Indicates whether the Work Item has ever been reopened
Resolved Date	Date on which the Work Item was last Resolved

Attributes	Description
Status	Status of the work item
Summary	Title or brief summary about the Work Item
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on

Metrics

Expand this link to view the list of metrics available as part of the Work Item Snapshot Monthly dossier.

Metric Name	Description	Formula	Expected Value
Avg of Age Since Creation (Days)	Average age of the work item in days.	$\frac{[\text{Age Since Creation Monthly}]}{([\text{Created Work Items} - \text{Monthly}] * 86400.0)}$	>0
In Progress Work Items	Work Item which are in In Progress state	Count([Created Work Items - Monthly]) where inprogress_flag = 'Y'	>=0
Max of Age Since Creation (Days)	Maximum time for which the Work Item was Created	$\text{Max}([\text{Age Since Creation Monthly}] / 86400.0)$	>=0
Min of Age Since Creation (Days)	Minimum time for which the Work Item was Created	$\text{Min}([\text{Age Since Creation Monthly}] / 86400.0)$	>=0
Proposed Work Items	Count of all work items whose current status category is "Proposed"	Count (Created Work Items) WHERE Work Item Proposed Flag (ID) = 'Y'	0 or >0
Reopened Work Items	Total number of work items that have been reopened (Status category changes from "Resolved" or "Closed" to an earlier status)	Sum [Reopened Count] Where Reopened Flag (ID) = Y	Closer to 0 is ideal

Work Item Snapshot Weekly dossier

Work Item Snapshot Weekly dossier enables you to create ad-hoc reports to analyze the flow of work items as it progresses through various status categories. Using this dossier, you can chart a weekly average age report.

Attributes

Expand this link to view the list of attributes available as part of the Work Item Snapshot Weekly dossier.

Attributes	Description
Assigned To	User responsible for working on the Work Item
Calendar Month	Gregorian calendar month displayed in the format 'Mon YYYY'
Calendar Week	Gregorian calendar week displaying the week number. For example, W21, W22.
Created Date	Date on which the Work Item was created
Date	Date on which the status of the Work Item moved to 'Created', 'In Progress', 'Resolved', or 'Completed'
Due Date	Date by when the Work Item is scheduled for completion.
Earliest Fix Version	Version to which the selected work item is associated as 'Fix Version'
In Progress Date	Date on which the Work Item first moved to the 'In Progress' status category
In Progress Flag	Indicates whether the Work Item is currently in the 'In Progress' status category
Last Iteration	The last sprint (iteration) to which the work item is associated with.
Last Updated Date	Date on which the work item was last updated
Overdue Flag	Indicates whether the Work Item is overdue (Current date is past the due date and the status category is less than 'Resolved')
Priority	Priority of the Work Item
Project	Project to which the Work Item is associated
Proposed Flag	Indicates whether the Work Item is currently in the 'Proposed' status category
Reassignment Count	Count of the number of times a work item was reassigned
Reopen Count	Count of the number of times a work item was reopened
Resolved Date	Date on which the Work Item was last Resolved

Attributes	Description
Status (Source)	Status of the work item as mentioned in the source
Summary	Title or brief summary about the Work Item
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on

Metrics

Expand this link to view the list of metrics available as part of the Work Item Snapshot Weekly dossier.

Metric Name	Description	Formula	Expected Value
Avg of Age Since Creation (Days)	Average age of the work item in days.	$\frac{[\text{Age Since Creation Monthly}]}{([\text{Created Work Items} - \text{Monthly}] * 86400.0)}$	>0
Created Work Items	Count of all work items that are created.	Count [Work Items Created]	>=0
In Progress Work Items	Count of all work items whose current status category is "In Progress"	Count [Work Items In Progress]	>=0
Max of Age Since Creation (Days)	Maximum time for which the Work Item was Created	$\text{Max}([\text{Age Since Creation Monthly}] / 86400.0)$	>0
Min of Age Since Creation (Days)	Minimum time for which the Work Item was Created	$\text{Min}([\text{Age Since Creation Monthly}] / 86400.0)$	>0
Proposed Work Items	Count of all work items whose current status category is "Proposed"	Count (Created Work Items) WHERE Work Item Proposed Flag (ID) = 'Y'	0 or >0
Reopened Work Items	Total number of work items that have been reopened (Status category changes from "Resolved" or "Closed" to an earlier status)	Sum [Reopened Count] Where Reopened Flag (ID) = Y	Closer to 0 is ideal

Work Item State Change dossier

Work Item State Change dossier enables you to create ad-hoc reports that help you analyze information related to the various states that a Work Item progresses through and the time duration in each of these states.

Attributes

Expand this link to view the list of attributes available as part of the Work Item State Change dossier:

Attributes	Definition
Assigned To	User responsible for working on the Work Item
Completed DateTime	The date on which the work item was marked as Completed or Closed
Created DateTime	Captures the created date of the work item
Current Status	Status of the work item at the time of the most recent data extract.
Description	Description about the Work Item
Epic	Epic number to which the work item is linked
Epic Name	Name of the epic to which the work item is linked
Fix Version	Version in which the Work Item is expected to be fixed.
In Progress DateTime	Date or time when the work item was set to 'In Progress' for the first time.
Iteration	Iteration to which this work item is associated.
Next Status	Next status of the work item relative to the specific transition
Priority	Priority of the work item
Project	Project to which the Work Item is associated
Reopened Flag	Flag (Y/N) to indicate whether the work item has ever been reopened
Resolved Date Time	The date and time on which the work item was marked as 'Resolved'
Status	Previous status of the Work Item relative to the specific transition.
Status Category	The status category that corresponds to the "Current Status" of the work item.
Status Change Count	Count of the number of times the status of a given work item has changed
Status Change DateTime	Date on which the Work Item changed status
Status Sequence Number	Sequence Number assigned to every status
Summary	A brief summary about the Work Item

Attributes	Definition
Work Item	Work Item refers to an issue that represents work to be completed. Work items can be of various types, such as task, enhancement, bug, epic, and so on
Work Item Number	Unique number for the Work Item

Metrics

Expand this link to view the list of metrics available as part of the Work Item State Change dossier:

Metric	Definition	Formula	Expected Value
Avg Status Change Count	Average number of status changes a work item has gone through	Avg (Status Count)	>0
Avg Status Duration (Days)	Average time spent by a work item in a particular status.	[Work Item Status Duration (Days)] / [Work Item Count from Activity] --> [Sum (Status Duration) / 86400] / [Count (Work Item Count from Activity)]	>0
Max Duration for Status (Days)	Maximum time spent by a Work Item in a particular status. This is a level-based metric and the calculations are performed only in the context of Work Item From Status attribute.	Max [(Status Duration) / 86400] {Work Item From Status (Source)}	0 or >0
Min Duration for Status (Days)	Minimum time spent by a Work Item in a particular status. This is a level-based metric and the calculations are performed only in the context of Work Item	Min [(Status Duration) / 86400] {Work Item From Status (Source)}	0 or >0

Metric	Definition	Formula	Expected Value
	From Status attribute.		
Status Change Count	Number of status changes a specific Work Item has been through.	Max (Status Count) {Work Item Number}	0 or >0
Status Duration (Days)	Time spent by a Work Item in a particular status.	Sum (Status Duration) / 86400	0 or >0
Total amount of time wasted	Total of time spent recorded on all work item which moved back from In progress to Proposed	NA	NA

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