TICKETING &

SERVICE DESK

FIELD GUIDE

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Contents

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The Ticketing & Service Desk Field Guide

What we're going to cover

The term ticketing is synonymous with Helpdesks; operational support structures that provide instant problem resolution and/or escalation. Service Desks, which are focused more on long-term operational improvement (primarily to reduce Helpdesk issues), have recently come to the fore with initiatives such as ITSM and its offshoot ITIL. Gemini supports both Helpdesk and Service Desk implementations. You can run both types of operation within the same project, categorising the workload by type, or you can separate the operational Helpdesk from the strategic Service Desk in separate projects and use cross-project Workspaces where the two overlap, as they invariably do.

Setting up a Helpdesk

Capturing the right data

To kick-start your Helpdesk, the Gemini sample data set includes a Project Template for a Helpdesk. You can use the sample template, modifying it if necessary or you can duplicate it and thus create your own. Either way the Project Template defines data at two levels that require consideration:

1. Type - the type of work item whose data you are capturing and for each Type:
    a. Screens (the fields, functionality and field-level permissions)
    b. Workflow (the status progression of work items from creation to closure)

Types are the types of work that a single project may capture. For example you may decide to capture Tasks, Change Requests and Issues in the same project and therefore set up 3 Types in your Helpdesk Project Template.

Note: *It is not an issue in Gemini to have different Types in different projects or the same Types in different projects. In Gemini, projects are containers of work that define ownership and permissions. Users work in Workspaces and Workspaces can span projects without ever bypassing project level security.*

Each Type can have unique data capture Screens (or share the Screen definition of another Type), where the fields and field level permissions (add, edit and view) are defined.

Each Type can also have unique workflow (or share the Workflow definition of another Type) associated with it.

You may wish to compare your data requirements with the Helpdesk template provided and make whatever modifications you need. Remember that Gemini lets you create a wide variety of custom fields so there should be nothing that you can't capture. Define which fields are mandatory and which are optional. Once you have decided that, you can determine default values that should apply to minimize data entry and reduce the chance of erroneous input. Finally, you might decide which fields can be seen and edited by which user groups.

An example ticket definition might look like the one below:

Field	Mandatory	User Access	Default
Issue Description	Y	Everyone	None
Severity Level	Y	Support Team	Medium
Due Date	N	Support Manager	TODAY
SLA Response Time	Y	Auto Generated	1 hour

Exercise: log into Gemini (if you don't have a Gemini instance then you can take a free hosted trial), navigate to the Project Templates (you must be a Gemini Administrator to do this) by selecting Customize…Templates (it is the default starting point of the Customize section). In the drop-down list of sample Templates select the Helpdesk Template. You will see it defaults different Types – Ticket, Bug, Task etc.

> **Exercise Step 1.** Click on the Screens hyperlink associated with Type Ticket and you will see the fields that are selected for that Type. Note the separation of actions into Creating (populating), Editing and Viewing each field. Click on the person icon associated with each field and you will see that this gives you a User Group selector, letting you define which groups of users can access a field and in which mode (creating, editing or simply viewing). If a user cannot create a field then they will not see it during the creation of that Type of work item.
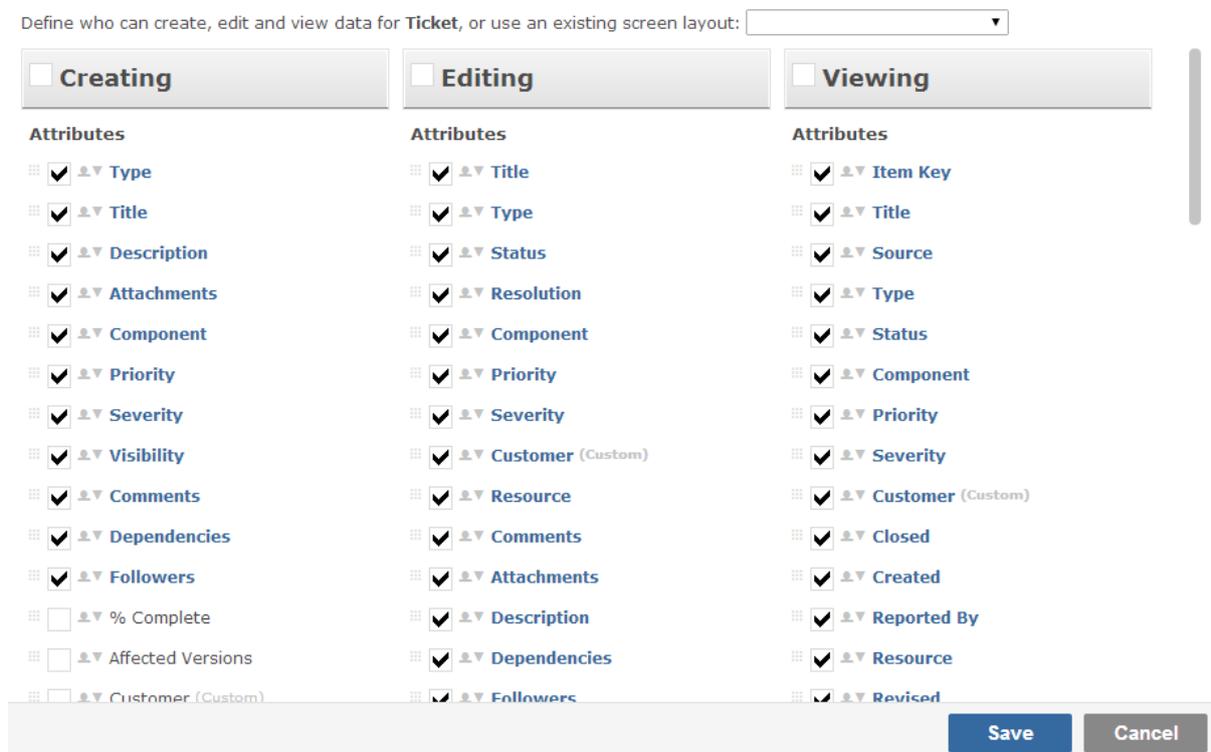

Fig 1.0 The Screen for the Project Template "Helpdesk", Type "Ticket".

Exercise Step 2. Click on the Workflow hyperlink associated with Type Ticket. What you see is the list of statuses that an item of Type Ticket can go through, drawn from the total list of user-definable Statuses. Workflow defines the paths that an item can go through from the point at which it is entered into the system to the point at which it is closed. You do not have to use all of the statuses that exist on the Template against any individual Type.

Click on the arrow that marks the transition from one status to another and you will see that you can delete the transition; you will also see the same User Group selector as when you clicked on the person icon in Screens (Step 1). Gemini lets you drag-drop draw Workflow but also lets you define which groups of users are allowed to change the status of an item and from which values. You could, for example, define a group of approvers and then only allow members of that group to set the status Approved, which might be a pre-cursor to development, deployment or closure of the task.
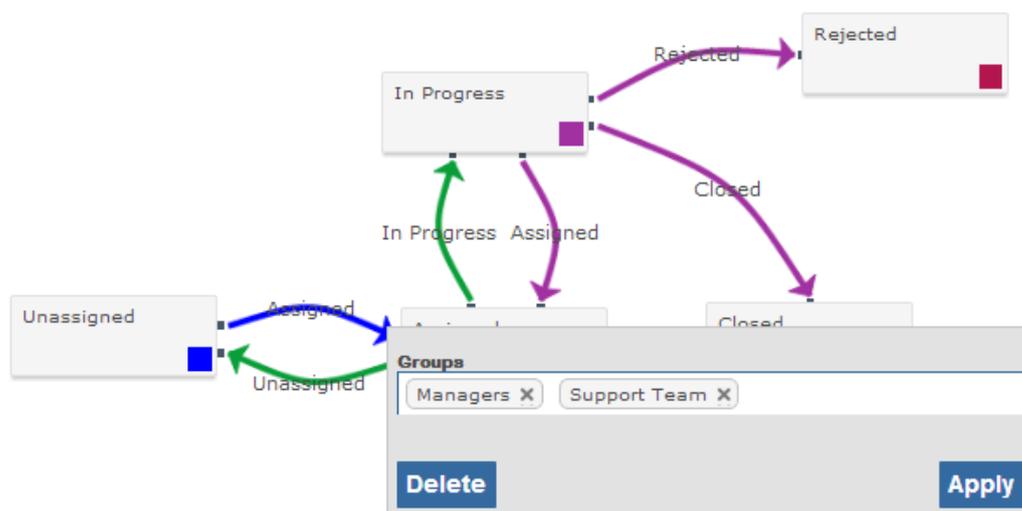

Fig 1.1 Example Workflow showing a status transition being restricted to certain User Groups.

Changing Process Types

One of the features of Gemini is that it allows *process transition*, which we will cover in more detail when we look at Service Desks. Process transition means you can start with one Type of transaction and convert it to another. For example a problem captured on the Helpdesk can start out as a generic Type "**Ticket"** and be converted to a more specific Type "**Bug"** that might require different data and permissions. Bug could then be converted to Type "**Change Request"** if it was discovered that the 'bug' was in fact a new enhancement. And so on… Provided the Types exist on the same Template, so Gemini knows what data and data rules exist around them, you can move to one another if you have the permissions to do so. In the example cited, all through the Ticket-Bug-Change Request conversion nothing is lost even if the different Types use different data fields with different permissions, and implement different workflow. Gemini simply hides fields that are not relevant to certain Types and exposes others. The outcome is that you end up with one version of the truth and simple transparency.

Setting permissions on data fields

This process of mapping field requirements has the side benefit of helping to determine who the groups of users are and what level of access each group needs to record, track and manage tickets. A ticket might have a field such as Resource on it, representing the name of the support specialist who will handle the problem. You might not want everyone to have access to that field, particularly if you have a triage process for tickets where they get assigned, which leads to the recognition of a separation of roles around the data set. Gemini field level permissions will let you define a field and set the permissions so that only people in certain groups can see and/or edit the field values.

Setting Project Defaults

To ease the burden of data entry, provide default values for users who enter data manually. You may also need to default values based on logic, using Gemini's Rules and Actions and in some cases you may have to default values because users quite simply can't enter them, in the case of a ticket that is generated from an email for example.

Default values are data, so they are defined against projects and not against a Project Template. You can build a Helpdesk project and a Service Desk project from the same Project Template but have different values default onto items created within them.

Exercise: log into Gemini and navigate to the Dashboard from the menu if you are not automatically taken there. Select any project by clicking on its name and then, from the menu in the top, select Settings. One of the Settings tabs lists the defaults for the selected project, which is a list of fields that you can set values for. You will see that you can set the default values for all Types or for a specific Type. If you have added any Custom Fields to Gemini they will appear in the list of fields to set default values for as Gemini treats Custom fields as if they come out-of-the-box.

Note: when setting defaults on date fields, Gemini will accept the values "TODAY", "TODAY+n", "START-MONTH" etc. If you set a task Start Date to TODAY and its Due Date to TODAY+1 then whenever the task is created it will be set to start on the day it is created and is due for completion the following day.

Converting emails to tickets

Converting emails into tickets is a simple process of configuring one or more mailboxes that users will send emails to. Gemini will poll the mailbox on a user-defined interval, making the email subject line the title of the ticket and the email text as the description. At the same time Gemini will apply the defaults for the Type to the ticket. Finally, Gemini will run the Rules and Actions engine, applying business logic to set field values and any SLA timers that have been defined based on the inbound email's address (full or partial match) or other business rules.

Exercise: log into Gemini, navigate to the Ticketing (you must be a Gemini Administrator to do this) by selecting Customize…Ticketing and see the Mailbox configuration settings. At the time of writing, if you take a trial from http://countersoft.com and select Ticketing as a use case, a default mailbox will be configured for you.

Watch this video from the Gemini video library of a Helpdesk mailbox being configured.

If you work in a controlled environment and cannot access email settings, you might want to give Gemini logon credentials, pass the link for the video to your email administrator and ask him or her to set up email for Gemini.

For more information on email-to-tickets in Gemini, see the documentation on Breeze, the email app, [here](#).

Setting up a Service Desk

Service Desks capture data to improve operational efficiency at a strategic level. They are less concerned with solving immediate operational need and more on identifying projects and processes to improve overall efficiency. Where a Helpdesk resets user passwords 10 times a week, the Service Desk will approach the same problem differently and initiate a project to implement Forgotten Password logic.

Capturing the right data

To help kick-start your Service Desk Gemini provides an ITIL Project Template. This defines basic data fields for the following Types:

- Events
- Incidents
- Requests
- Problems
- Identity
- Tasks (generic)

Connecting a Service Desk to other projects

Given the nature of Service Desks they rarely exist in an environment of utopian project success. Service Desks thrive where Helpdesks are inundated and projects are under pressure. It follows that one can either duplicate the issues that the Service Desk is trying to track from the other projects in which they arise or one can connect the Service Desk initiatives to their root cause. The latter is much better because it retains one of the principles of best practice that Gemini is based on; have just one version of the truth. Link issues to solutions, tasks and activities, duplicate nothing.

Fortunately, Gemini has three features that make this linkage quite simple:

- Workspaces
- Related Items and Dependencies
- Type transformation

Workspaces

Workspaces are discussed in detail in the downloadable pdf *Getting Productive With Workspaces <THIS SHOULD BE HYPERLINKED>*. With regard to Service Desks and linkage to other projects, Workspaces can pull together items from one, several, or all projects, based on *any* field filter criteria in *any* of the projects. For example specific Helpdesk Tickets, Software Development Tasks, Business Requirements etc can all be pulled into the same Workspace as Service Desk Types, if they are related. Gemini even manages the fact that the different Types of work may belong to different fields and have different rules, building a dynamic superset of data and filters for you to work with.

Related Items and Dependencies

To let you directly link work items together, Gemini has two features: Related Items and Dependencies, both of which are project agnostic. This means you can link work across different projects and you can a piece of work in one project dependent on a piece of work in another.

Relating/Linking Items

Related Items are enabled on the Project Template, and are enabled by default on the ITIL Template for Events, Incidents, Requests and Problems. If you do this then in the Item View screen (shows all of the Item's detail) you can link one Gemini Item to another from the toolbar displayed on the right hand side of the screen by clicking on the link icon and selecting the item you wish to link it to.

Related items require a reason code to explain the relationship; for example because one is a duplicate or the items share a causal relationship. These reason codes can be maintained by someone with the Gemini Administrator privilege by navigating to Customize…Links.

Creating Dependencies

Where one item is dependent on its completion on another you should use Dependencies, which are also found on the Item View screen and its toolbar. You can, in the Item View screen, either find an existing item and make it a 'child' of the current item or you can create a new work item as a child of the current item, the choice being indicated by a "+" in the middle of the Dependencies icon.

Gemini will show (and let you manage) the dependency hierarchy on the Item View screen . It will also show the dependency hierarchy on the Items Grid if the Display Option "Group Dependencies" is enabled, whereby it will collapse child items underneath the top level parent and allow the user to expand/collapse the tree.

For more information on Related/Linked items and Dependencies see the online documentation here.

See also: IMS-417 (Duplicated, Assigned)

Dependency tree:

INTRA-48 Are we SARBOX compliant ? (In Progress)   Estimate: 45h 0m   Logged: 4h 20m

    INTRA-50 Validate Password Encryption (In Progress)   Estimate: 6h 0m   Logged: 0h 0m

    INTRA-51 Ensure change audit trail (In Progress)   Estimate: 8h 0m   Logged: 0h 0m

      INTRA-52 Do we need to track system initiated amends? (In Progress)   Estimate: 4h 0m   Logged: 0h 0m
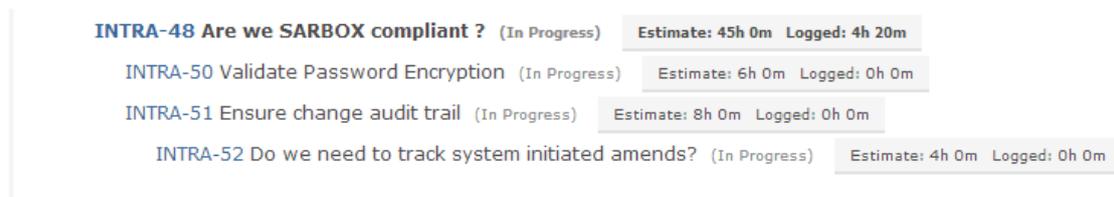
Fig 1.0 Showing Related Items (IMS-417 with its Reason code and Status) and Dependencies in Item View

Type Transformation

We touched upon Type Transformation earlier on, in the section *Changing Process Types*. This is a much deeper subject and the extent of its use will vary from enterprise to enterprise and by scenario. Suffice to say that a work item can start out as one thing and be changed to another, where Gemini respects the rules of the Type of work the item is being changed **to**. The deeper significance of this feature, particularly with regard to (but not exclusively so) Service Desks is that Gemini also lets you **move** work items from one project to another.

What starts out as a Helpdesk Ticket can be adjudged to be the basis of a Problem in the Service Desk, which requires the involvement of the Software Development team and so it becomes a Story or a Bug, which then requires Testing and is classified as a Defect and so on… The Ticket can start out in the Helpdesk project, get moved and transformed into a Problem in the Service Desk, get moved and transformed into a Bug in a Software Development project etc.

In all of these cases of transformation, two things are of vital importance:

1. **Nothing gets lost**. If the problem started out as an email and there is ongoing dialog, or comments are made and files attached, it all remains with the item through its life. That comments, attachments, field values etc. may not be visible to everyone involved in the resolution of the work are just permission rules that Gemini will dynamically apply. Gemini will hide field values that do not belong to a destination template, so they can always be 'recovered' and reported on, it will not wipe them out. Gemini will also keep a full audit of every change made to the work item.
2. **Workspaces track everything**. Users do not have to go and find their work, they only need to have a Workspace that filters the things they care about. Gemini brings your work to your Workspace. If a Ticket becomes a Problem then it can move straight out of the view of the Ticket handler and into the view of the ITIL PM without anyone doing anything but the move. Gemini will automatically notify anyone working in the ITIL Workspace of the arrival of the new work item and subsequently track all of its changes.
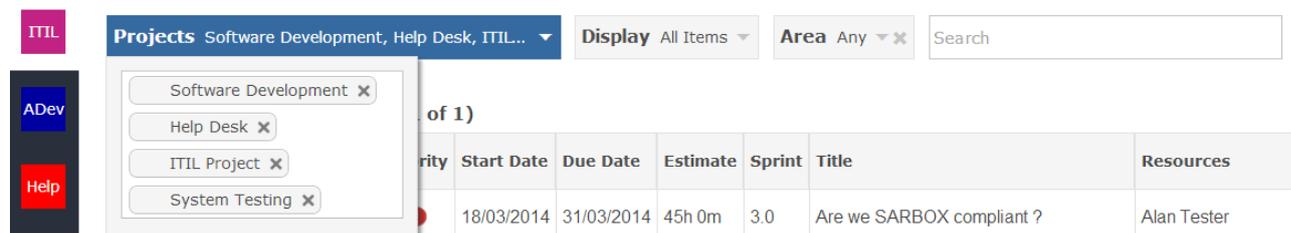

Fig 3.0 Sample ITIL Workspace showing the ease of filtering across projects

Responding the right way

Whether your Helpdesk or Service Desk captures work from manual input or email it is often important to respond to stakeholders in timely and appropriate ways. For example if someone sends an email to the helpdesk, responding immediately with an email that has a Ticket number and a message telling them what kind of response time they can expect is a good thing. Users who do not receive an immediate response tend to create an additional support burden simply because they will chase up whether their communication has been received.

To help you respond the right way Gemini has a number of standard features:

Customizable Email Templates

When you configure a Mailbox in Gemini one of the options is to Respond to inbound emails. If you enable this then you will be prompted for an Email Template. Gemini has customizable HTML email templates for every type of even that can trigger an email response. These email Templates have placeholders that let you inject into the email field values from the Ticket (or other item Type). A directive like "@(Model.TheItem.Title)" in the HTML tells Gemini to insert the work item's Title field

value at that point in the HTML. You can even inject user-defined Custom fields. For more information on configuring Email Templates see the documentation here. To see the Alert Templates in the system and to add/modify them, navigate to Customize…System…Alert Templates.
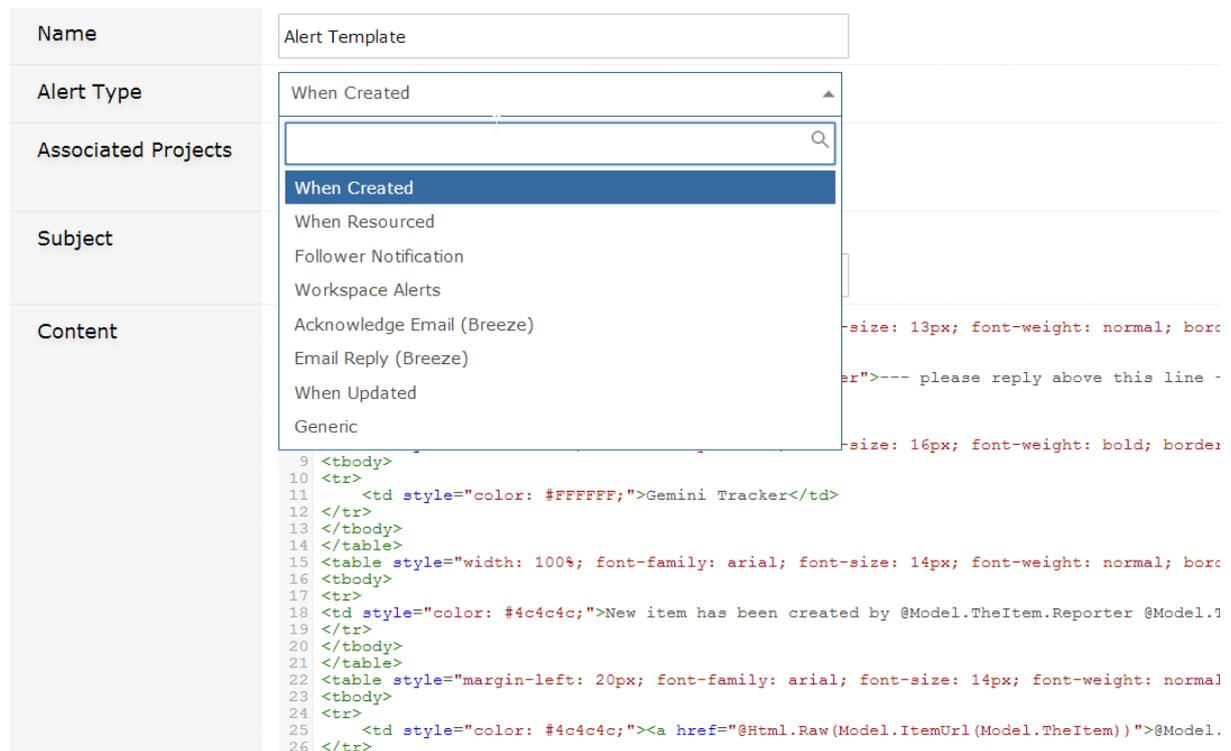

Fig 4.0 Gemini's Alert Templates

Followers Field

Gemini has a special field called Followers. When enabled on a Project Template the Followers field lets you select one or more users who will receive email notifications when the item changes. There is an Email Alert Template for what a Follower notification email will look like so you can choose both the format and the content of the email. For more information on setting Followers see the documentation here.

Gemini has a full apps framework consisting of Timer apps, Event apps and UI apps. One of the default Event apps that ships with Gemini out-of-the-box is Auto Follower, which can be found by navigating to Customize…Apps… Event Apps. When enabled this app will fire on Item Creation and Update setting the Item Creator and any Resources assigned to the item as Followers.

For more information on Gemini's apps framework (or the Gemini API), especially if you are interested in building integrations into Gemini, see the developer documentation here. Sample, Open Source apps can be found at http://Countersoft.github.io.

Workspace Alerts, Subscriptions and Reports

If you read *Getting Productive With Workspaces*, which was referenced earlier, you can skip this section. If not, you might want to read it when you know that Workspaces allow you to:

- Set up notifications for when items are created, updated or commented upon. If anything comes into the scope of your Helpdesk or Service Desk Workspace(s) Gemini can send you an email.
- Subscribe other users to your notifications and alerts
- Send individual items to other users from the Workspace
- Set up metrics to track work that falls within the scope of the Workspace (#of open Tickets etc)
- Set up hourly, daily, weekly or monthly schedules of Excel reports and subscribe other Gemini users to those reports

Rules/Actions and Setting SLA Response Times

Gemini contains a Rules and Actions engine of which SLA is a subset. Rules and Actions allow you to define business rules that trigger some form of action in Gemini, such as the setting of a field value or the sending of an email. The easiest and fastest way to get a handle on Rules/Actions and SLA is to see [the documentation](), which contains two short videos, one on Rules and Actions and one on SLA. The videos will show you how to create Rules and Actions and how to define an SLA and the rules that Start, Stop or Pause the clock.

Monitoring Progress

Eye Candy

Eye Candy is so called because Gemini uses Green/Amber/Red traffic light highlighting on items that are in SLA. If you enable SLA tracking in your projects then Gemini has a feature called Eye Candy to help you track your response times. On the Items Grid one of the Display Options is to show the SLA zone.

Note: The Project Template must enable the SLA field under View permissions or you will not be able to see the SLA zone or fields.

Gemini zones split the Items Grid into a region at the top where users cannot filter or sort items out of view and a region below that does respond to their filter and sort, delimited by a line.
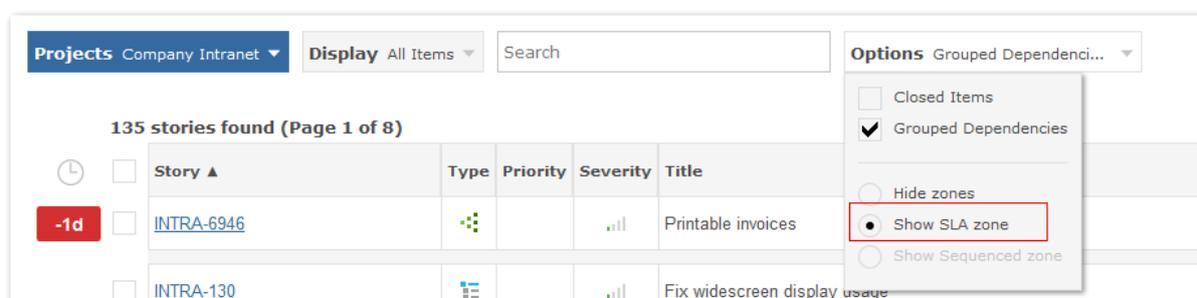

Fig 5.0 Gemini's SLA Zone (timer and Eye Candy on the left of the item)

There are two zone types, Sequence and SLA. For now we shall focus only on the SLA zone. When enabled, Gemini places items whose SLA response time puts them in a status of Amber or Red

into the zone. In other words, if you switch on the SLA zone those people who are responsible for tracking and dealing with SLA labelled items cannot avoid seeing them when they are approaching breach.

If you view SLA then Gemini will also count down the response time on The Grid.

Note: *Like all fields, you decide if you want to see the SLA or not from the cog in the top right of the Items Grid, which gives you the list of available fields.*

The SLA zone, like the filter, columns, column order and selected screen are stored as part of the Workspace, so you control by sharing the Workspace what users see regarding SLA.

Reporting

We have mentioned that you can run scheduled reports in the Workspace(s) that you use for your Helpdesk and Service Desk. You can also set up any additional reports that you require. Gemini's reporting is very simple and you need only a basic understanding of how you get data out of Gemini and a working knowledge of Excel to create your own reports.

Whatever you filter in the Items Grid, whether it is via a Workspace or simply the filtering of data for one or more projects from the Dashboard, Gemini will export to Excel. The toolbar on the right hand side of the Items Grid contains the Reports tab, at the top of which you have the straightforward export to Excel, CSV or HTML. There is also an Upload link, which tells you that you can create your own custom reports and if you do so they will be added to the list of reports in the tab.

Gemini respects your permission settings so that even if a user can see a report to execute, if they do not have permissions to view the data at a project, row or field level, the data will not be exported.

For more information on Reporting and to see how to create your own custom reports see the documentation here.

Metrics

Workspaces let you define dynamic metrics simply by clicking on the right hand toolbar, selecting the Metrics tab and then selecting the types of metrics you want Gemini to track for you. For more information on Metrics see the documentation here.

Who is doing what?

Gemini also makes the process of tracking work by resource very simple. In the first instance you can filter by the Resource field, alternatively you can create a simple Excel Report or download, but the most sophisticated option is probably to use the right hand toolbar again and click on the People tab. This will activate the Resource filter for you, showing you who is assigned to tasks in your Workspace, what tasks are unassigned and when your people come free based on the latest Due Date of the tasks they are assigned to (assuming you set Due Dates, which isn't mandatory unless that is how you have configured Gemini). For more information on the People pane see the documentation here.

Geckoboard Integration

We mentioned the Gemini apps framework earlier in this document. The result of this framework is that there are a lot of integrations into Gemini, one of which is a Geckoboard app. This allows you to create widgets that can be displayed on a variety of devices so that if you want a DEFCON-style Helpdesk or Service Desk you can do so easily.

For more information on the Gemini Geckoboard integration and how to set your Geckoboard up see the documentation here.
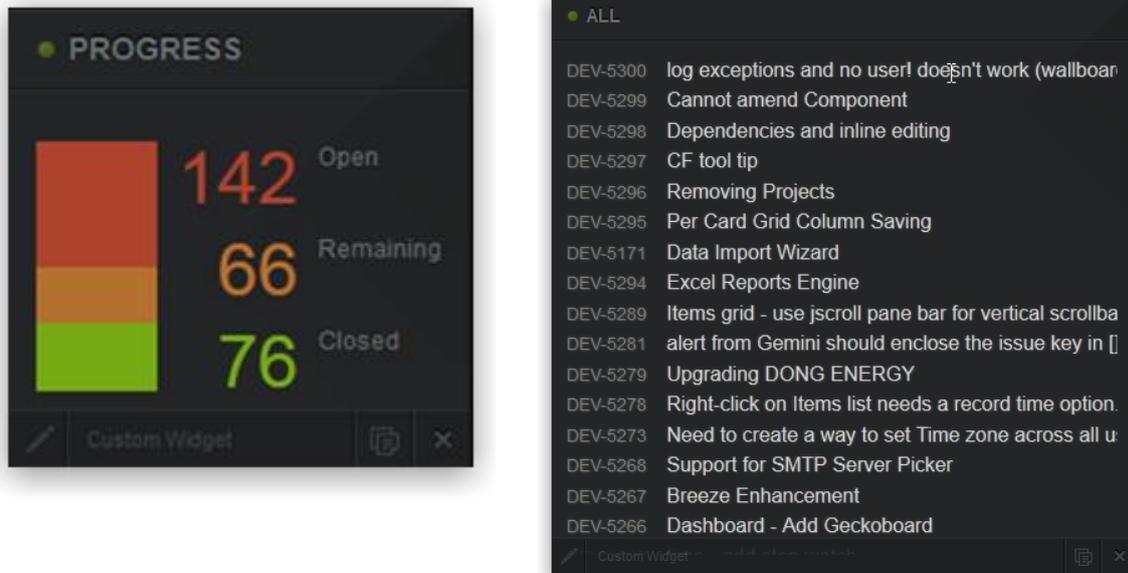
Fig 6.0 Samples widgets from a Geckoboard integrated with Gemini