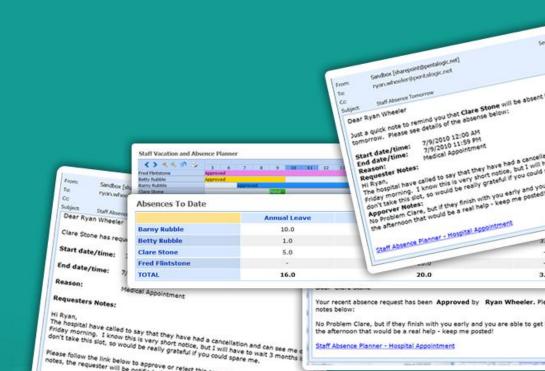


Create a SharePoint Staff Vacation Planning System

DIY Guide



Using Pentalogic SharePoint Planner, PivotPoint and Reminder webparts



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INTRODUCTION

SharePoint offers a great foundation for non-programming business people to build applications around our business processes, just the way we want them. This guide will show you how to build your own SharePoint staff vacation and absence planning system.

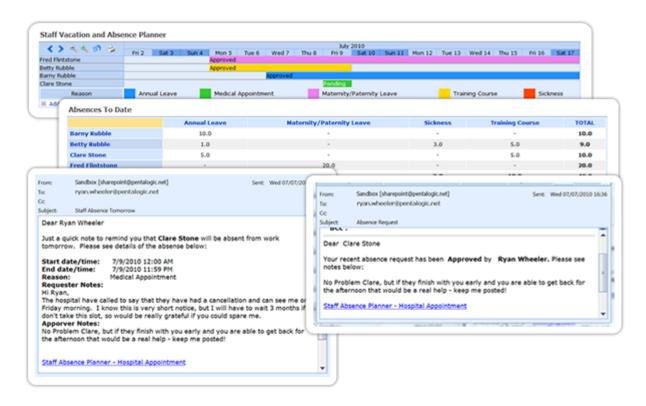
Staff vacation and absence planning can cause trouble and strife in any organization. The good old wall planner can work for staff who are all in the same physical locations . . .

. . . . until you approve an absence then forget to enter it on to the planner, and then allow someone else to book vacation at the same time, leaving your department under staffed.

.... or until you forget that Sam has booked a week's vacation and call him up furious on Monday morning asking why he isn't in work.

.....or authorize Jenny's week off in the Caribbean only to get a thorough ticking off from HR because you have allowed Jenny to exceed her annual leave entitlement.

I've been guilty of all these crimes in my time. So I was pleased to find that with SharePoint we can make things a little more organized, and using our <u>PivotPoint</u>, <u>Reminder</u> and <u>Planner</u> web parts together we can set up a slick little Vacation Planning system in just a few minutes.



So, what we are aiming for here is:

- A dashboard "Absence Planner" display, which will be accessible to all staff via SharePoint.
- Personal and managers "Absences to Date" dashboards.
- An automated Absence Request approval system
- An email reminder to line managers of imminent staff absence.

It's important to note that this is not a ready made "Vacation Planning" template, it's a guide showing how you could set up your own system using some of SharePoints built in features and then add a little pizazz with our web parts. It's going to take a little work to set this up for your organisation but when it's done it should be a better fit than a packaged solution.

Setting up the Vacation Planner system should take you about an hour if you have our webparts already, a little more if you need to download them.

To build the full system you will need Pentalogic Planner, PivotPoint and Reminder webparts. If you don't already have the webparts, you can <u>download free trial versions here.</u>

FIRST SET UP YOUR LIST

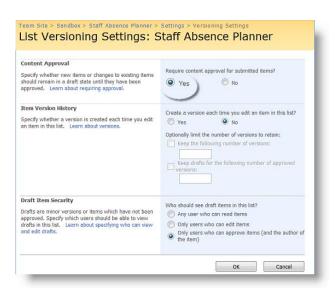
For the basis of our planning system we are going to use a Calendar List, add some extra columns, and switch on Approvals.

So, from which ever section of your site you want choose select **Site Actions** from the top right of the page, then from the dropdown, select **Create** then from the **Tracking** tab, select **Tasks**.

Call your list whatever you want - **Staff Absence Planner** works for me, decide whether you want it to display in the quick launch menu - probably no need as few people will need to access the list that way once we have our system set up. Then select **no** in the **Alerts** option. Click OK and you list is set up.

Now go to the **Settings** tab in your list and first of all choose **Create Column**. We are going to add a few extra columns to the list. Add the columns **Requested By** and **Authorized By**, the column type for both of these is "Person or Group" and you want them both to display in the default view. Make these mandatory fields by clicking **Yes** for **Require that this column contains information**. Now we are going to add a column to show the **reason** for the absence - annual leave, maternity leave, training, sabbatical, whatever. The column type for this column is going to be **Choice** and again we are going to made completion of this field mandatory, and show the field in the default view. Finally a column for the **number of days** of each absence, we want this to be a number column, I have set the minimum value to 0.5 days and the maximum to 30 days, and again we want it to be a mandatory field.

Next let's **switch on Approvals**. Back in the **Settings** tab of your list choose **List Settings** and from the **General** tab choose **Versioning Settings**. In **Content Approval** click **Yes** and we are done with the list set up.



SET UP FILTERED VIEWS

Now for the filters. If you haven't made much use of filters before it may be worth having a look at these resources:

SharePoint Filter Articles

Filters can really enhance the power of SharePoint lists, and we are going to use 3 here in our vacation planner.

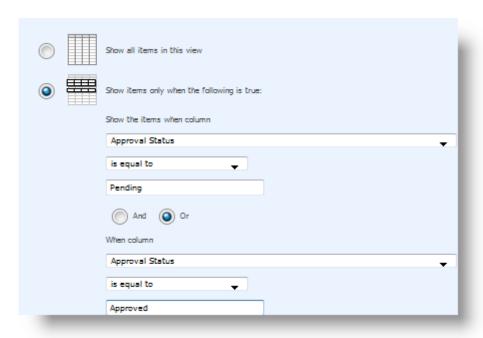
#1 - APPROVED AND PENDING ABSENCES FOR PLANNER "WALL CHART"

We want our Planner to provide a dashboard "Wall Chart" type display for all staff, showing absences requested and approved. So that staff can see when it will be possible to book an absence and managers can decide whether they wish to approve a staff absence request.

Our list actually contains 3 approval status's "Pending", "Approved" and "Rejected" we don't need to display absence requests that have been rejected on our Planner, so we are going to set up a list view to show just "Pending" and "Approved" requests.

Go back to **Site Settings** and choose **Create View**. From the menu here choose **Standard View**. N.B. This choice is very important - Planner only works on Standard views. In the Create View Page add a name for your view, we have used **Staff Absences - Approved and Pending**. In the **Audience** section be sure you have checked **Create Public View** this again is an essential for Planner to work. In the column section choose the columns that you wish to display to people who are creating or entering a list item. This will not impact of the Planner display.

We are then going to skip over the "Sort" section and from the **Filter** section choose **Show Items only when the following is true.**



Column **Approval Status** is equal to **Pending** OR column **Approval Status** is equal to **Approved**. Click OK and we are done with the filter.

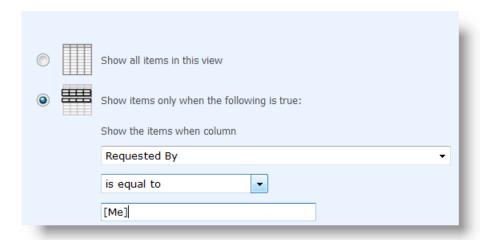
#2 - APPROVED ABSENCES FOR MANAGERS "ABSENCES TO DATE" DASHBOARD

Set up of this is exactly the same as the last one, except we are going to call it "Absences to Date" and and just show items where column approval status is equal to approved.

#3 - THE MAGICAL [ME] FILTER, FOR "MY ABSENCES" DASHBOARD.

If you haven't used this filter before you are going to love it! It shows whoever is logged in just the list items relating to them, so its ideal for our "My Absences" dashboard view, but also has a whole host of other uses.

We need a Standard, public view again - yes even though it's "My Absences" it's still a public view or other people won't be able to use it. Call it **My Absences** then head down to the filter section and choose to show items where column **Requested By, is equal to [Me]**.



So, now we have laid the foundations for our system by setting up the basic list and filters.

SET UP A "WALL PLANNER" DASHBOARD

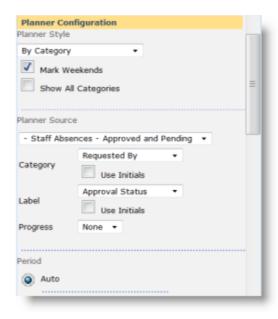
So having set up our Vacation and Absence list, we can now apply Planner webpart, to create a vacation and absence dashboard like this:



So staff and managers can easily see who is off when, and when it will be possible to request leave.

If you don't already have our <u>Planner webpart you can download the free trial version here</u>.

You will find all the <u>installation instructions for SharePoint Planner webpart here.</u>



Now we are ready to set up the Planner web part. Decide where you would like this to display, perhaps your HR home page, or your team home page, select **Site Actions**, **Edit Page**, **Add a Web part** then select **Planner**.

From the top right hand corner of the Planner web part which will have appeared on your page click **edit** and **Modify shared webpart** you will now see the Planner Configuration Panel on the right hand side of your screen.

So, we are going to set the Planner up like this:

Planner Style: By Category

Planner Source: is the view you just set up, so in our case: Staff Absences - Approved and Pending

Category: Requested by, so the names of the people requesting absence will appear down the left hand side of the Planner.

Label: Approval Status, so each absence will be labelled Approved or Pending.

You can leave **Period** set at **auto** Planner will display in the format most appropriate to the items you have entered into your list and you can easily scroll back and forth and zoom in and out.



The next section we are going to change is **Set colour by column**. We are going to set this by the **Reason** column, and choose a different colour for each of the Reason choices we set up in our list.

This will allow us to see at a glance why a team member is absent. In this section you should also choose where and how to display the color coding key, ours is underneath the Planner chart.

And that's the Planner set-up done.

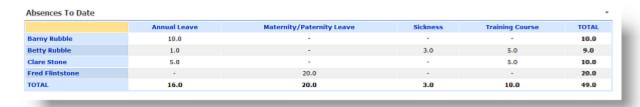
For more information on SharePoint Planner set up and configuration click here.

Or take a look at this for more info on using color coding in SharePoint Planner.

In the next section we will look at setting up our "Absences to Date" dashboard, using PivotPoint webpart.

SET UP AN "ABSENCES TO DATE" DASHBOARD

So having set up our basic SharePoint list with filtered views, and our "Wall Chart" dashboard, using SharePoint Planner webpart, we are now ready to get up our "Staff Absences to date" and "My Absences" dashboards. This is the bit that allows managers to monitor the amount of absence each of their team members has had:



Or for individual staff members to monitor their own absences:



For this part of the process you are going to need SharePoint PivotPoint webpart.

If you don't have PivotPoint already you can download the free trial version of PivotPoint here.

And you will find all the installation instructions for PivotPoint here.

So we need to set up 2 webparts, and you will need to give some thought to where you are going to put them. "My Absences" is intended to be visible to anyone, so that could go on your main team page, or your

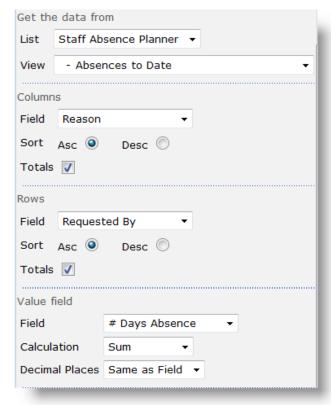
HR home page. "Absences to Date" however is only meant for managers, so you will need to place it in a location where only your managers have viewing permissions.

The webpart setup is very simple. Let's start with "Absences to Date" add the webpart to your chosen page in the same way as we did in part 2.

Now "edit shared webpart". What PivotPoint is going to do is add all the absences, of each type, that each of your staff members has had in the current year*, then present this information to you, in a table which will be automatically updated every time some has more time off approved.

In the webpart configuration tool tell PivotPoint to get its data from the **Staff Absence Planner** List and the **Approved Absences view**.

For the **columns** of our table we want the **Reason** field from our list, and for the **Rows** we want the **Requested By field**. We will have **Totals** on both columns and rows. Our **values** will come from the **#Days Absence** field and the **Calculation** we want to perform is a simple **Sum**.



For the set up of the "My Absences" webpart, everything is the same other than the view you want to watch, which is **My Absences**. There is also little point having **totals** on the columns for this one.

So, now we are finished, apart from one little glitch, which is how to handle "this year"

*Clearly for this dashboard we only want to be displaying absences in the current absence year. Now luckily, you don't actually need to sort this out right now, you have until the end of your current year to think about how you handle it, but it's going to need doing sooner or later so best to give it some thought now.

There are two methods you could use for ensuring these dashboards are only showing data from the current year. The first is to set up a filter on the list, so that PivotPoint only looks at SharePoint list events for the current year.

The second possible method is to <u>set the system up as a SharePoint site</u> template, and create a new site for each year.

Either one may work for you, and you have a little while to decide which method suits you best.

CREATE AN ABSENCE APPROVAL WORKFLOW

So far we have laid the foundations for our tailor made Staff Vacation and absence planning system. We have set up the basic SharePoint list, defined a number of list views, and set up dashboards using SharePoint Planner and PivotPoint webparts.

Now we are going to add the "moving parts" to the system and set up the absence request approval workflow using SharePoint Reminder webpart.

We are going to have 3 steps in our system :-

- An email to a staff member's line manager when a new request for absence has been submitted.
- An email the staff member and let them know whether their request has been approved or rejected.
- An email the line manager the day before a staff member is due to be absent from work as a reminder.

If you don't already have <u>SharePoint Reminder Webpart you can download the free trial version</u> and view the installation instructions.

ABSENCE REQUEST EMAIL

To set up your first Reminder add the webpart to a convenient web part page in just the same way as you added the Planner web part. Remember, with Reminder, there will be no need for the team to actually see the web part, once it is set up all the work goes on behind the scenes.

Now go to "Modify Shared Web part" and set the web part up.

Watch List: Staff Absence Planner

For this Reminder you do not want to show all columns, or expand recurrences, so leave both these boxes unchecked.

Read Records that are: "Pending" we want to look at new requests that have not yet been approved or rejected.

You can find more information on Reminder's "Watch List" settings here.

Email Reply To: this feature allows recipients of Reminder emails to reply to a specific person, so in this instance we might want to give the absence authorizer the option to reply to the person who has requested leave, this would allow them to do things like query and absence request before approving or rejecting it. If you don't want to get that sophisticated at this stage just leave this field blank.

Email To: "Authorized by" we want to email the line manager who will authorize the absence request.

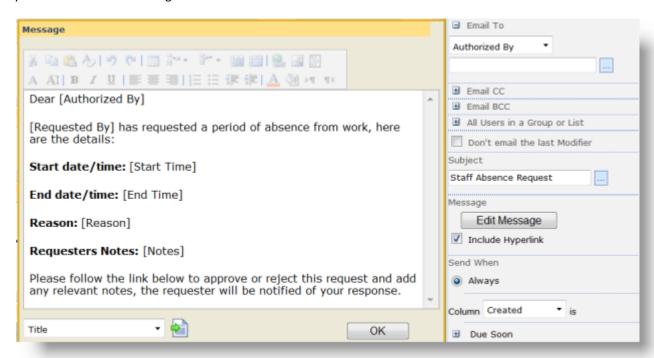
You can then ignore the CC, BCC, all users in a group and "Don't email Last Modifier" options.

For the *Subject* of your email choose something like "Absence Request Authorization Required"

Now to edit the email message.

Click on the "Edit Message" Button and a Text Editor box will appear, very much like a Microsoft Word window. You can use Rich Text formatting such as bold, colors and different font sizes in your message. You

can also use the drop down at the bottom of the window to insert merge data from fields in your list, just as you would with a "Mail Merge" in word.



You can find more information on formatting the content of your SharePoint Reminder email here.

For "Send When" choose "Always".

Then for "Send Email" choose "once" - we are going to assume that our line managers are efficient and will respond to requests the first time round, without repeated nagging!

You will find more information on SharePoint Reminder's "Send When" options here.

In the "Check List" section, set Reminder to check the list once per hour, and you are done.

REQUEST APPROVED/REJECTED REMINDER

The set up of the next two Reminders is very similar. For our "Absence Request Approved/Rejected" Reminder the only things that you will change are:

Read Records that are: for this one choose "approved" and "rejected".

Email To: choose "Requested By"

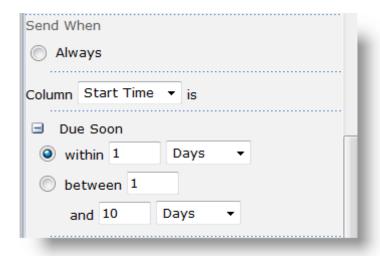
Choose a new email subject and edit the email text, you will want to include "approval status, and I have also included "Authorized By" to include the line managers name, and "Approver Comments" to include any explanatory notes that the line manager has made.

For "Send When" we are again choosing "Always" and "Once". This will send one email for all approved and rejected items on the list.

"STAFF OFF WORK TOMORROW" REMINDER

For the third Reminder, which warns the line manager of an imminent absence, the setup is again quite similar.

For this one we want to Read Records that are "Approved", send the email to the person in the "Approved By" column. Rather than sending an email "Always" in this case we want to send an email when "Start Time" is "Due Soon". I have set Due Soon to "Within 1 Day" but as you can see you can choose whatever timescale works for you.

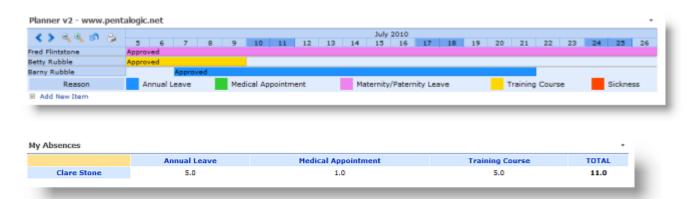


So, that's the setup completed, not too painful I hope? Now let's take a look at the system in action.

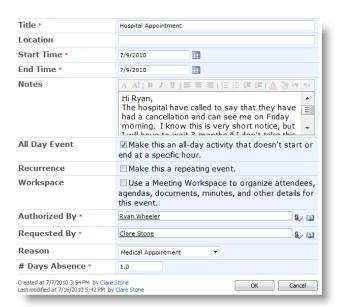
SEE THE SYSTEM IN ACTION

So, now let's reap the rewards for all of our hard work and see the system in action.

I need to book a day off for a hospital appointment on Friday 9th of July. I can see all the absence bookings for my department and the number of days I have had off this year on the absence dashboards above. I've only had 1 day off for Medical Appointments so far this year and I am allowed 3 so that's fine - but 3 people are off on that day already, it's going to be tough, but I really need to go to that appointment.



So, as you can see, I can add a new item to the planner straight from the link in the webpart, I don't need to go to the list.



Ryan receives the absence request email and from looking at his dashboards he can see that although I am well within my Medical Appointments entitlement approving this absence is going to leave him really short staffed on Friday - but he can't face the thought of listening to me moaning about my in-growing toenail for another 3 months, so he approves the request.



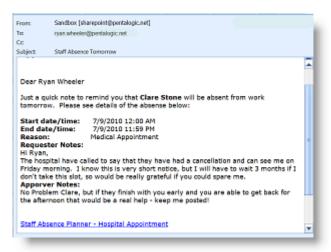
Absences To Date								
	Annual Leave	Maternity/Paternity Leave	Medical Appointment	Sickness	Training Course	TOTAL		
ubble	10.0	-	-	-		10.0		
ibble	1.0	-	-	3.0	5.0	9.0		
one	5.0	-	1.0	-	5.0	11.0		
ntstone	-	20.0	-	-		20.0		
	16.0	20.0	1.0	3.0	10.0	50.0		
	-		-			-		



Once the request is approved I get an email notifying me, and the status of the absence changes from "pending" to "approved" on the absence planner.



And for the final step in the process, is the email to Ryan on Thursday, to remind him that I am off the next day, giving him chance to make sure all my work is covered.



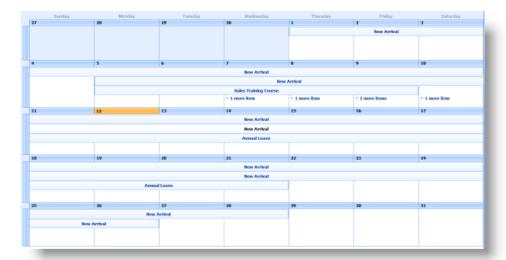
So now we should have no excuse for messing up staff absence planning ever again!

SO CAN'T I DO THIS WITH SHAREPOINT OUT OF THE BOX?

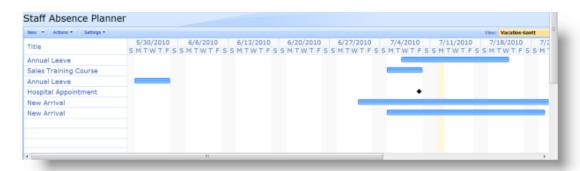
Well some of it. Clearly, your basic list and filtered views are all set up in SharePoint out of the box.

When if comes to your dashboard views there are some limitations.

This is how your Vacation Planner Wall Chart looks out of the box:



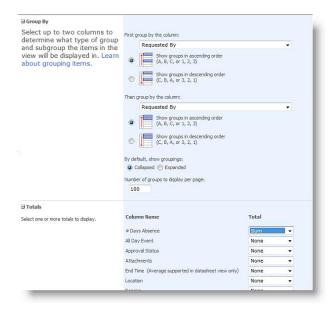
or as a gantt view:



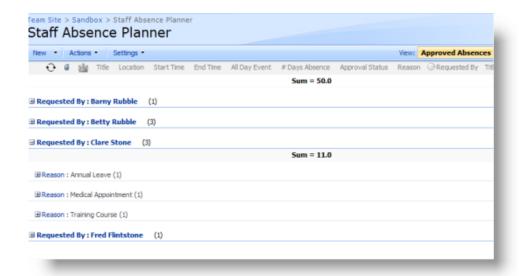
We have lost all of our color coding, it's not possible to show the name of the person who is absent, unless you make this the title of the event, and we have no way of distinguishing between approved and pending items.

For the "Absences to Date" and "My Absences" dashboards we can achieve something similar, if a bit clunky, out of the box. From the settings tab in your Staff Absence Planner list, choose edit current view.

Head down to Group By and choose Requested By and Reason. Then expand the Totals section and choose # Days Absence and sum.



This will give you a view like this:



The information is all there, but I have to work to get at it. For example Ryan can see that I have had 11 days off this year, covering 3 separate occasions, but he is going to have to drill into each individual event and get his calculator out to figure out how many of my days off have been annual leave, training or Medical.

Then on to the workflow emails. It is possible to generate email alerts for the absence request and the request approval, but the solution isn't perfect. For absence requests an administrator can set the list up to email all line managers within your company or department, every time a new request is added to the list. This means that managers will get absence requests from their own staff, but also from all other staff as well. The only way to avoid this would be to set up a separate absence request list for each line manager.

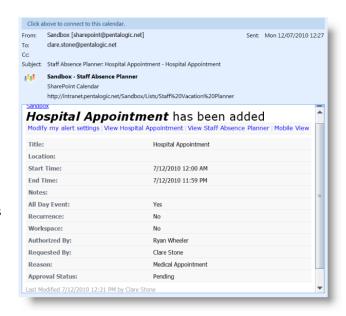
For the request approved/rejected email the requester will need to set up an alert on each request as they create it, asking to be alerted any time anything changes on that list item.

When the alert emails arrive, this is how they look:

There is no way to edit the email, and give the recipient clues on what they are supposed to do with it.

The final "John Smith is off work tomorrow" email, cannot be generated in SharePoint out of the box, as it doesn't do date based alerts.

So - can you build a staff absence planning system with SharePoint out of the box? I guess the answer is "kind of". It is possible to build a basic system but it's going to lack some useful functionality and may now be enormously user friendly.



We hope you've found this guide useful.

If you would like to try the Vacation planning system you can <u>download a 30 day free trial of the SharePoint Vacation Planner Toolkit Software here.</u>

And as always, if you have any questions or comments, we would love to hear them.



*Pentalogic SharePoint Staff Vacation Planner Toolkit contains single server licenses for Pentalogic SharePoint Planner, Reminder and PivotPoint webparts. This is not a template – you will need to set up your own, bespoke SharePoint Vacation Planning system using the Toolkit and this guide. Use of the webparts is not restricted to the Vacation Planner system. These are fully functional webparts and in addition to their use in the Vacation Planner system can be used as you wish on your licensed server. Please visit our website for suggestions on other potential uses for the webparts: www.pentalogic.net

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