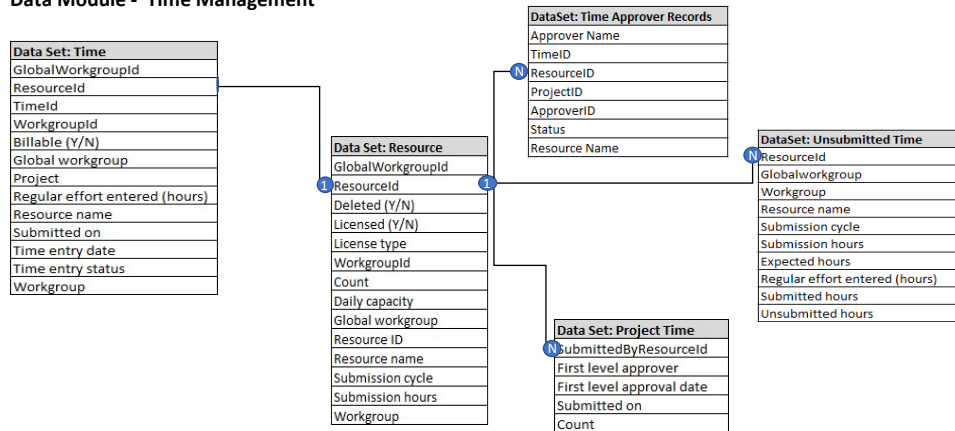




## Data Module - Time Management



### DataModule: Time Management

Column Name	Data Set	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info
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#### CALCULATIONS:

Number of all time records submitted	DataSet: Time	aggregate(Timeid)	Usage: Measure Calculate after aggregation	
Weekly submission capacity	DataSet: Resource	aggregate(Weekly Submission Capacity)	Usage: Measure Calculate after aggregation	
Most recent time submitted by resource	DataSet: Time	maximum(Submitted for Resource name)	Usage: Attribute	
Date previous week Friday	DataSet: Time	_add_days(_add_days(current_date, (-1 * _day_of_week(current_date,2)) - 7),4)	Usage: Attribute	
Resource count	DataSet: Time	count( distinct (Resource name))	Usage: Measure Calculate after aggregation	Folder: Weeks/Days Missing Since Last Time Submitted
Number of weeks late		ceiling (Number of days late/7)	Usage: Measure Aggregate: Average	
Number of days late		_days_between( Date previous week Friday, Most recent time submitted by resource)	Usage: Measure Calculate after aggregation	
Average number of days to approve greater than 0		Average Number of Days to Approve > 0	Filter	Folder: Project Time Approval
Average Number of Days to Approve		Number of days for all records / Total number of records	Usage: Measure Calculate after aggregation	
Number of days for all records	DataSet: Project Time	aggregate(Days Between Approval Date and Submitted Date x Count)	Usage: Measure Calculate after aggregation	
Total number of records	DataSet: Project Time	aggregate (Count)	Usage: Measure Calculate after aggregation	
Expected hours greater than 0		Expected hours > 0	Filter	Folder: Submitted/Unsubmitted Hours
Expected hours	DateSet: Unsubmitted Time	aggregate (Expected hours)	Usage: Measure Calculate after aggregation	
Submitted hours	DateSet: Unsubmitted Time	aggregate(Submitted hours )	Usage: Measure Calculate after aggregation	
Submitted hours (%)	DateSet: Unsubmitted Time	aggregate (Submitted hours ) / aggregate(Expected hours)	Usage: Measure Calculate after aggregation	
Unsubmitted hours	DateSet: Unsubmitted Time	aggregate(Unsubmitted hours)	Usage: Measure Calculate after aggregation	
Unsubmitted hours (%)	DateSet: Unsubmitted Time	aggregate (Unsubmitted hours) / aggregate(Expected hours)	Usage: Measure Calculate after aggregation	
Submitted hours greater than 0		Submitted hours > 0	Filter	Folder: Approved/Unapproved Submitted Hours
Submitted hours	DataSet: Time	aggregate(Regular effort submitted (hours))	Usage: Measure Calculate after aggregation	
Submitted unapproved hours (%)		Submitted unapproved hours / Submitted hours	Usage: Measure Calculate after aggregation	
Submitted unapproved hours		Submitted hours — Submitted approved hours	Usage: Measure Calculate after aggregation	
Submitted approved hours (%)		Submitted approved hours / Submitted hours	Usage: Measure Calculate after aggregation	
Submitted approved hours	DataSet: Time	aggregate(Approved time (hours))	Usage: Measure Calculate after aggregation	
Number pending approval	DataSet: Time Approver Records	count(Time ID)	Usage: Measure Calculate after aggregation	Folder: Pending Approval Time Entries

### DataSet: Time

Column Name	Data Set	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info
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#### FILTERS:

Most recent time with previous week Friday	DataSet: Time	Last_Time_Entered <= Previous_Week_Friday	
Time entry date previous week	DataSet: Time	Time entry date between Last week Monday and Last week Sunday	

#### CALCULATIONS:

Last week Monday		CASE _day_of_week(current_date,1) WHEN 1 THEN _add_days(current_date, -1 * _day_of_week(current_date,2)) ELSE _add_days(current_date, (-1 * _day_of_week(current_date,2)) - 7) END	
Last week Sunday		_add_days( Last_week_Monday , 6)	
Sort for workgroup	DataSet: Time	Upper( Workgroup )	
Previous week Friday	DataSet: Time	_add_days(_add_days(current_date, (-1 * _day_of_week(current_date,2)) - 7),4)	Usage: Attribute Aggregate: None
Most recent time submitted	DataSet: Time	maximum( Submitted_on for Resource_name )	Usage: Attribute Aggregate: Maximum
Number of record in pending approval	DataSet: Time	if( Time_entry_status is not null and (Time_entry_status = 'Pending' OR Time_entry_status = 'Pending second approval')) then ( 1 ) else (0)	Usage: Measure Calculate after aggregation
Number of submitted records	DataSet: Time	if( Time_entry_status is not null) then (1) else (0)	Usage: Measure Calculate after aggregation
Pending approval time (hours)	DataSet: Time	if( Time_entry_status is not null and Time_entry_status like 'Pending%') then (Regular_effort_entered_hours) else (0)	Usage: Measure Aggregate: Total
Approved time (hours)	DataSet: Time	if( Time_entry_status is not null and Time_entry_status = 'Approved') then (Regular_effort_entered_hours) else (0)	Usage: Measure Calculate after aggregation
Regular effort submitted (hours)	DataSet: Time	if( Time_entry_status is not null) then (Regular_effort_entered_hours) else (0)	Usage: Measure Calculate after aggregation

#### DataSet: Project Time

Column Name	Data Set	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info
FILTERS:			
N/A			
CALCULATIONS:			
Days between approval date and submitted date x Count	DataSet: Project Time	Days between approval date and submitted date' x 'Count'	Usage: Measure Aggregate: Total
Days between approval date and submitted date	DataSet: Project Time	_days_between( First_level_approval_date, Submitted_on )	Usage: Measure Calculate after aggregation

#### DataSet: Resource

Column Name	Data Set	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info
FILTERS:			
N/A			
CALCULATIONS:			
Sort for workgroup	DataSet: Resource	Upper( Workgroup )	
Weekly submission capacity	DataSet: Resource	(C_Submission_hours_weekly)	Usage: Measure Aggregate: Total
Submission hours (weekly)	DataSet: Resource	if (Submission_cycle = 'Not applicable') then (0) else if(Submission_cycle = 'Daily') then (Submission_hours*5) else (Submission_hours)	Usage: Measure Aggregate: Total

#### DataSet: Time Approver Records

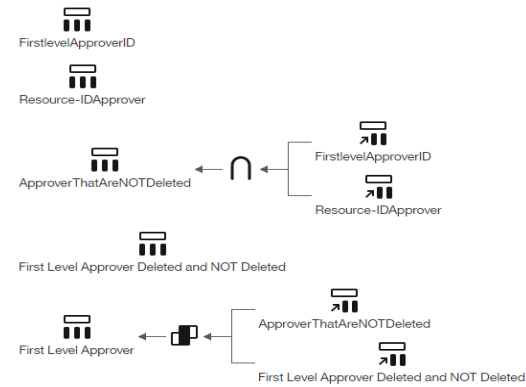
Column Name	Data Set	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info
FILTERS:			
N/A			
CALCULATIONS:			
N/A			

#### DataSet: Unsubmitted Time

Column Name	Data Set	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info
FILTERS:			
N/A			
CALCULATIONS:			
Sort for workgroup	DataSet: Unsubmitted Time	Upper( Workgroup )	



## Data Set: Project Time



### Query: FirstlevelApproverID

Changepoint Model Name	Database Field Name	Changepoint Model Source	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info**
ApprovedByResFirstLevelId	ApprovedByResFirstLevelId	Time Workflow > ProjectTimeWorkflow		
First level approver	ApprovedByResFirstLevel	Time Workflow > ProjectTimeWorkflow		

### Query:Resource-IDApprover

Changepoint Model Name	Database Field Name	Changepoint Model Source	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info**
			[ Resources].[ Resource].[ Deleted] = 0	Detail Filter
ResourceId	ResourceId	Resource >  ResourceId		
Resource name	ApprovedByResFirstLevel	Resource >  ResourceName		

### Query: ApproverThatAreNOTDELETED

Comment: Intersection of FirstlevelApproverID and Resource-IDApprover Query

Field Name	Path	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info**
ApprovedByResFirstLevelId	[Intersect1].[ ApprovedByResFirstLevelId]		

### Query: ApproverThatAreDELETED and NOT DELETED

Changepoint Model Name	Database Field Name	Changepoint Model Source	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info**
First level approver	ApprovedByResFirstLevel	Time Workflow > ProjectTimeWorkflow		
ApprovedByResFirstLevelId	ApprovedByResFirstLevelId	Time Workflow > ProjectTimeWorkflow		
Timeld	Timeld	Time Workflow > ProjectTimeWorkflow		
Submitted on	SubmittedDate	Time Workflow > ProjectTimeWorkflow		
First level approval date	ApprovedDateFirstLevel	Time Workflow > ProjectTimeWorkflow		
SubmittedByResourceId	SubmittedByResourceId	Time Workflow > ProjectTimeWorkflow		
Count	Count	Time Workflow > ProjectTimeWorkflow		

### Query: First Level Approver

Comment: Inner Join ApproverThatAreNOTDeleted and First Level Approver Deleted and NOT Deleted on |ApprovedByResFirstLevelId  
This will only show the records that are NOT Deleted

Field Name	Path
First level approver	[First Level Approver Deleted and NOT Deleted].[First level approver]
ApprovedByResFirstLevelId	[First Level Approver Deleted and NOT Deleted].[ ApprovedByResFirstLevelId]
Timeld	[First Level Approver Deleted and NOT Deleted].[ Timeld]
Submitted on	[First Level Approver Deleted and NOT Deleted].[Submitted on]
First level approval date	[First Level Approver Deleted and NOT Deleted].[First level approval date]

[SubmittedByResourceId]	[First Level Approver Deleted and NOT Deleted].[SubmittedByResourceId]
Count	[First Level Approver Deleted and NOT Deleted].[Count]

**DataSet: Project Time**

Query: First Level Approver Query

Field Name
[SubmittedByResourceId]
First level approver
First level approval date
Submitted on
Count



## Data Set: Resource

Changepoint Model Name	Database Field Name	Changepoint Model Source	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info**
			[Deleted (Y/N)] = 0	Detail Filter
			[Licensed (Y/N)] = 1	Detail Filter
			[License type] not in ('Undefined User')	Detail Filter
GlobalWorkgroupId	GlobalWorkgroupId	Resources > Resource		
ResourceId	ResourceId	Resources > Resource		
Deleted (Y/N)	Deleted	Resources > Resource		
Licensed (Y/N)	Licensed	Resources > Resource		
License type	ResourceTypeDescription	Resources > Resource		
WorkgroupId	WorkgroupId	Resources > Resource		
Count	Count	Resources > Resource		
Daily capacity	HoursperDay	Resources > Resource		
Global workgroup	GlobalWorkgroupName	Resources > Resource		
Resource ID	UserDefinedResourceId	Resources > Resource		
Resource name	ResourceName	Resources > Resource		
Submission cycle	CertificationCycle	Resources > Resource		
Submission hours	CertificationHours	Resources > Resource		
Workgroup	WorkgroupName	Resources > Resource		



## Data Set: Time

Changepoint Model Name	Database Field Name	Changepoint Model Source	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info**
			[ Resources . [ Resource . [ CertificationCycleCode] <> 'N']	Detail Filter
			[Time entry date] > _add_years (current_date,-1)	Detail Filter
GlobalWorkgroupId	GlobalWorkgroupId	Time > Time Combined		
ResourceId	ResourceId	Time > Time Combined		
Billable (Y/N)	Billable	Time > Time Combined		
Global workgroup	GlobalWorkGroupName	Time > Time Combined		
Project	ProjectName	Time > Time Combined		
Regular effort entered (hours)	RegularHoursBooked	Time > Time Combined		
Resource name	ResourceName	Time > Time Combined		
Submitted on	SubmittedDate	Time > Time Combined		
Time entry date	TimeDate	Time > Time Combined		
Time entry status	TimeStatus	Time > Time Combined		
Workgroup	WorkGroupName	Time > Time Combined		



## Data Set: Unsubmitted Time

Resources who entered time

Resources



### Query: Resources who entered time

Changepoint Model Name	Database Field Name	Changepoint Model Source	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info**
			[Time entry date] between [Last week Monday] and [Last week Sunday]	Detail Filter
[GlobalWorkgroupid]	GlobalWorkgroupid	Time Combined > GlobalWorkgroupid		
[Resourceid]	Resourceid	Time Combined > GlobalWorkgroupid		
Global workgroup	GlobalWorkGroupName	Time Combined > GlobalWorkgroupid		
Regular effort entered (hours)	RegularHoursBooked	Time Combined > GlobalWorkgroupid		
Resource name	ResourceName	Time Combined > GlobalWorkgroupid		
Time entry status	TimeStatus	Time Combined > GlobalWorkgroupid		
Workgroup	WorkGroupName	Time Combined > GlobalWorkgroupid		
Time entry date	TimeDate	Time Combined > GlobalWorkgroupid		
Last week Monday			CASE _day_of_week(current_date,1) WHEN 1 THEN _add_days(current_date, -1 * _day_of_week(current_date,2)) ELSE _add_days(current_date, (-1 * _day_of_week(current_date,2)) - 7) END	
Last week Sunday			_add_days([Last week Monday], 6)	
Submitted hours		Time Combined > GlobalWorkgroupid	aggregate ( if ([Time entry status] is not null) then ([Regular effort entered (hours)]) else (0) )	

### Query: Resources

Changepoint Model Name	Database Field Name	Changepoint Model Source	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info**
			!([Resources].[Resource].[Deleted]) = 0	Detail Filter
[GlobalWorkgroupid]	GlobalWorkgroupid	Resources > Resources		
[Workgroupid]	Workgroupid	Resources > Resources		
[Resourceid]	Resourceid	Resources > Resources		
Resource name	ResourceName	Resources > Resources		
Global workgroup	GlobalWorkGroupName	Resources > Resources		
Workgroup	WorkGroupName	Resources > Resources		
Submission cycle	CertificationCycle	Resources > Resources		
Submission hours	CertificationHours	Resources > Resources		
Daily capacity	HoursperDay	Resources > Resources		
Expected hours			if([Submission cycle] = 'Not applicable') then (0) else if ([Submission cycle] = 'Daily') then ( [Submission hours]*5 ) else ([Submission hours])	

### Query: Resources who have entered time and who have not

Comment: Outer join resource to resources who entered time on Resourceid

Data Item Name	Path	Calculation (if applicable)	Formatting / Behavioral Comments Additional Info**
		[Global workgroup] <> 'N/A'	Detail Filter
Resource name	[resources who entered time].[Resource name]		
[Resourceid1]	[resources].[Resourceid]		
Workgroup1	[resources].[Workgroup]		
Global workgroup	[resources].[Global workgroup]		
Expected hours	[resources].[Expected hours]		
Regular effort entered (hours)		if ([resources who entered time].[Regular effort entered (hours)] is null) then (0) else ([resources who entered time].[Regular effort entered (hours)])	
Submitted hours		if ([resources who entered time].[Submitted hours] is null) then (0) else ([resources who entered time].[Submitted hours])	
Unsubmitted hours		if([Submitted hours]>= [Expected hours]) then (0) else ([Expected hours] - [Submitted hours])	
Time entry status		[resources who entered time].[Time entry status]	
Submission cycle		[resources].[Submission cycle]	
Submission hours		[resources].[Submission hours]	

### DataSet: Unsubmitted Time

Query: Resources who have entered time and who have not

Field Name
[Resourceid1]
Global workgroup
Workgroup
Resource name
Submission cycle
Submission hours
Expected hours
Regular effort entered (hours)
Submitted hours
Unsubmitted hours



## Data Set: Time Approver Records

This data set is based off of sql query

Database Tables used: Time Approver Records and Resources

Field Name
Approver Name
TimeID
ResourceID
ProjectID
ApproverID
Status
Resource Name

### SQL Query

WITH CTE

AS

(

select r.Name as ApproverName, a.TimeID as TimeID, a.ResourceID as ResourceID, a.ProjectID as ProjectID, a.ApproverID as ApproverID, a.Status as Status

FROM dbo.Resources as r

inner join TimeApproverRecords as a

on r.ResourceID =a.ApproverID

)

,

CTE\_Resource

AS

(

select r.Name as ResourceName, r.ResourceID as Resource\_ResourceID

FROM dbo.Resources as r

inner join TimeApproverRecords as a

on r.ResourceID =a.ResourceID

)

Select \*

FROM CTE WITH (NOLOCK)

inner join CTE\_Resource

on cte.ResourceID=CTE\_Resource.Resource\_ResourceID

Group by cte.ApproverName, cte.TimeID, cte.projectID, cte.ResourceID, cte.ApproverID, CTE\_Resource.ResourceName, CTE\_Resource.Resource\_ResourceID, cte.Status

Order by ApproverName