

1. Calendar Functions

Calendar Functions	Not started	1.0 Calculate field Values for Calendar Tables
	Purpose	After the user enters vacation days, and configures start dated, PEMS calculates the number of days in a term.
	Trigger	Recalculate anytime there is a change to any records used to make these calculations upon save
	Conditions	Initial configuration was completed.
	Sequence	These functions may be run anytime there is a new school term record. need some way to limit how many times this is recalculated.
	Step 1	For each new School Term record, calculate the number of calendar days between the start and end dates, excluding the days specified in the associated Term Label record. Enter result in School Term calendar days.
	Step 2	For each School Term , count the number of associated Vacation Days records with status = activated.
	Step 3	Calculate School Term school days by subtracting the number of vacation days found above from the school days, enter as School Term calendar days
	Step 4	Academic Year school days is the sum of the associated School Term school days.
	Step 5	Academic Year calendar days is the sum of the associated School Term calendar days.
END		

Calendar Functions	Not started	1.1 Automatically Create Academic Years Past and Future
	Purpose	<i>Automate creating new academic future academic records when the user-defined promotion date has been reached. This reduces the need for users to add a year every time they complete one.</i>
	Trigger	<i>Promotion Date (school configuration) = actual date</i>
	Conditions	<i>Initial configuration was completed.</i>
	Sequence	<i>This function must run before more school terms can be created.</i>
	Step 1	Find the academic year record the farthest in the future, the " <u>last record</u> "
	Step 2	Create one more academic year record
	Step 3	Set field values: Sequence = last record sequence + 1 Start year = last record start year + 1 End year = last record end year + 1 Academic year name - concatenate start year - end year start date = last record start date + 1 year end date = last record end date + 1 year. set status = future
END		

Calendar Functions	Not started	1.2 Automatically Update Status of Academic Years.
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	<i>Purpose</i>	<i>Academic Year records have a status of current, past, or future, update the status of the records automatically when the user-defined promotion date has been reached.</i>
	<i>Trigger</i>	<i>Managed by the Promotion WorkFlow</i>
	<i>Conditions</i>	<i>There can be only one current year.</i>
	<i>Sequence</i>	<i>This step is best triggered after the next future record has been made and in accordance with the PROMOTION workflow.</i>
	Step 1	Set previous current academic year status to 'past'
	Step 2	Set next year, based on ordinate to current.
END		

Calendar Functions	Not started	1.3 Automatically Create School Term Records
	<i>Purpose</i>	<i>Automate student term records creation as new academic years are added.</i>
	<i>Trigger</i>	<i>When a new academic year is added.</i>
	<i>Conditions</i>	
	<i>Sequence</i>	<i>This step is best triggered after the creation of a new academic year record. Term records must be made before students can have their plans updated.</i>
	Step 1	Find the first term label record with Flag = official start term.
	Step 2	Create a new school term record
	Step 3	Set Term Start Year and Start Date Academic year: start date => term: start date Academic year start year => term: start year

<i>calculate estimated dates, terms may run over an calendar year</i>	Step 4	Calculate Term End Year, Term End Date If Term Label "End in same year" = true then: Term End Year = term: <u>start year</u> Term End Date = Term: <u>start year</u>; Term label:end month: Term Label End day If Term label "End in same year" = False then: Term End Year = term: <u>start year</u> + 1 Term End Date = Term: <u>end year</u>; Term label:end month: Term Label End day
	Step 4	Set other term field values: Name - concatenate term label name and term: start year status = future term label => related term label record academic year => related academic year record term label flag => term flag
	Step 5	If term label: flag not equal to "official end term" then go to the next term label record, increase term label: sequence by one.
	Ste 6	Set Term Start Year and Start Date If <u>previous</u> term label record (sequence -1) end month <= (LESS THAN OR EQUAL TO) term label start month, term start year = <u>previous</u> term (ordinate -1) end year Else term start year = <u>previous</u> term (ordinate -1) end year + 1
	Step 6	Continue to the next Term Label record (sequence + 1), stop when sequence + 1 can not be found (note we must continue past 'official end term' into optional terms.
	Step 7	Set other term fields per step 4
END		Review 1.3 Use Case Test

Use Case Test 1.3 Automatically Create School Term Records

Classic Semesters I								
	Term Label Start Month	Term Label End Month	Term Label Flag	Term Label End in Same Year	School Term start year		School Term end year	
Academic Year	9-2023	5-2024						
Fall	9	1	Official Start Term	false	flag = official start term start year so start year = academic start year = 2023	pass	"end in same year" = false so term end year = term start year + 1 = 2024	pass
Spring	1	5	Official End Term	true	<u>previous</u> term label record (sequence -1) end month <= term label start month, so term start year = <u>previous</u> term (ordinate - 1) end year = 2024	pass	"end in same year" = true so term end year = term start year = 2024	pass

Summer	6	8		true	previous term label record (sequence -1) end month </= term label start month, so term start year = previous term (ordinate - 1) end year = 2024	pass	"end in same year = true so term end year = term start year = 2024	pass
Classic Semesters II								
Academic Year	8-2023	5-2024						
Fall	8	12	Official Start Term	true	flag = official start term start year so start year = academic start year = 2023	pass	"end in same year" = true so term end year = term start year = 2023	pass
Spring	12	5	Official End Term	false	previous term label record (sequence -1) end month </= term label start month, so term start year = previous term (ordinate - 1) end year = 2023	pass	"end in same year" = false so term end year = start year + 1 = 2024	pass

Summer	6	7		true	<u>previous</u> term label record (sequence -1) end month </= term label start month, so term start year = <u>previous</u> term (ordinate - 1) end year = 2024		"end in same year" = true so term end year = start year = 2023	pass
Classic Semesters III								
Academic Year	8-2023	5-2024						
Fall	8	12	Official Start Term	true	flag = official start term start year so start year = academic start year = 2023	pass	"end in same year" = true so term end year = term start year = 2023	pass
Spring	1	5		true	<u>previous</u> term label record (sequence -1) end month NOT </= term label start month, so term start year = <u>previous</u> term (ordinate - 1) end year + 1 = 2024	pass	"end in same year" = true so term end year = term start year = 2024	pass

Summer	6	8	Official End Term	true	previous term label record (sequence -1) end month <=/ term label start month, so term start year = previous term (ordinate - 1) end year = 2024	pass	"end in same year" = true so term end year = term start year = 2024	pass

Calendar Functions	Not started	1.4 Automatically Calculate Vacation Days In Terms and Academic Years
	Purpose	Academic Year records have a status of current, past, or future, update the status of the records automatically when the user-defined promotion date has been reached.
	Trigger	Managed by the Promotion WorkFlow
	Conditions	There can be only one current year.
	Sequence	This step is best triggered after the next future record has been made and in accordance with the PROMOTION workflow.
	Step 1	Set previous current academic year status to 'past'
	Step 2	Set next year, based on ordinate to current.
END		

