## Concept to keep SM approvals in Propel 2.20 in line with approval delegation in SM9.41

When Propel 2.20 initially syncs orders with SM, the existing SM Approval Delegation settings are taken into account to fetch the approvals in Propel 2.20.

However, when the Approval Delegations are changed in SM, Propel isn't notified about these changes so the approvals in Propel are not updated.

Following Service Manager based concept will generate SxEntityChangesV2 records when Approval Delegation settings are created/changed in SM so Propel can re-synchronize the approvals taking into account the new Approval Delegations.

## Check for Approval Delegation changes in SM:

Create a trigger of the type "2 - After Add" for the ApprovalDelegation table

Trigger Name:	SX Concept Add
Table Name:	ApprovalDelegation
Trigger Type:	2 - After Add 🚽
Application:	EQ.
Script:	1lib.ApprovalDelConcept.ApprovalDelegationPropel(record)

Create a trigger of the type "4 - After Update" for the ApprovalDelegation table

Trigger Name:	SX Concept Update	
Table Name:	ApprovalDelegation	▼ 🛃 🔍
Trigger Type:	4 - After Update 👻	
Application:		<b>8</b> Q
Script:	11ib ApprovalDolConcept ApprovalDolegationPropol(record)	

11ib.ApprovalDelConcept.ApprovalDelegationPropel(record)

## Force update of ApprovalDelegation record when it is expired:

Service Manager doesn't automatically disable expired ApprovalDelegation records which means that out of the box there is no update which executes the After Update trigger for this case. A javascript can be scheduled which forces an update to set the Enabled checkbox to false for all the expired Approval Delegation records.

Create a schedule record which calls a ScriptLibrary function

chedule: 6209056			
Name:	Propel Approval Delegation	Class:	report
Schedule ID:	6209056	Expiration:	07/04/16 13:31:00
Number:		Scheduled Class:	report
Status:	rescheduled	Action Time:	07/04/16 13:30:51
Description & Javascript & Strings &	Numbers 🗇 Booleans / Times 🧇 Stacked Queries		
Description			Repeat Interval       Monthly       Quarterly       Semi-Annualty       Annualty       Other       00:05500
Problem Status:			
Application			
schedule: 6209056			
Name	Propel Approval Delegation	Class	report
	Propel Approval Delegation 6209056	Class: Expiration:	report 07/04/16 13:31:00
Name			
Name: Schedule ID:		Expiration:	07/04/16 13:31:00

## ScriptLibrary containing used functions:

Create a ScriptLibrary named "ApprovalDelConcept" containing the functions called by the 2 triggers and the schedule record

```
//Function called by triggers for ApprovalDelegation table in order to generate SxEntityChangeV2 records.
function ApprovalDelegationPropel(ADrecord)
      var App = new SCFile("Approval");
      var unique ="";
var query = "";
      var module ="";
      var id = [];
      //Current code only supports interaction based approvals. Switch-case can be extended for other modules if needed.
      switch (ADrecord.AppModule)
      {
            case "SVC":
           module = "incidents";
           query = "file.name =\"incidents\" or file.name=\"svcCartItem\""
           unique = "incident.id";
            break;
      }
      var rc = App.doSelect(query+" and \""+ADrecord.Approver+"\" = current.pending.groups")
      while (rc==RC_SUCCESS)
      if (lib.ArrayUtil.indexOf(id, App.unique_key) == -1)
      {
            id.push(App.unique_key);
            var record = new SCFile(module);
            record.doSelect(unique+"=\""+App.unique_key+"\"");
lib.SX_EntityChangeV2.entityAfterUpdate(unique, record, record)
       }
       rc = App.getNext();
       continue;
//Set Enable field to false for all expired ApprovalDelegation records
function UpdateExpiredADRecords()
{
      var ADrec = new SCFile("ApprovalDelegation");
      var rc =ADrec.doSelect("Enable=true and DateTo <tod()");</pre>
      while (rc==RC_SUCCESS)
      {
            ADrec.Enable=false;
            ADrec.doUpdate();
            rc=ADrec.getNext();
      }
}
```