

LS Omni Mobile Loyalty User Guide

LS Nav 2013 (7.1)



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1 Introduction

The purpose of this document is to give an overview of *Mobile Loyalty* in NAV and the *Published Offers* functionality.

The following document has been added to the LS Nav 2013 (7.1) release and is a useful supplement to the main document:

• LS Omni Mobile Loyalty Data Mapping Details LS Nav 7.1

1.1 Definitions, Acronyms and Abbreviations

Term	Description	
Mobile Database	Microsoft SQL Server database used by Mobile devices	
QR-Code	Two dimensional bar code	



2 Mobile Loyalty

The *Mobile Loyalty* functionality is an addition to the *Member Management* system introduced in LS version 6.3.

This new functionality gives the Retailer the ability to publish already specified offer or coupon to a mobile device user (Mobile Phones, Tablets) who is registered as **Member Contact** in the *Member Management System*. The Retailer can direct certain offers or coupons to a member that has registered special interests. The member can then select the offers he or she wants to trigger on the device and connect it to the POS by a QR-Code. The POS user can scan the QR-Code and activate the offers and coupons selected by the member at any time during a transaction.

A new feature has been added to the *Mobile Loyalty*, now the Member can also shop. To Pick up in store or get Items delivered.

Necessary data is replicated from the NAV database to the Mobile Database using Scheduled Jobs and Data Director. The Mobile system can only create or update data in NAV by using Web Services.



3 Published Offers

Offers and **Coupons** can be published in a simplified manner to mobile devices. The customer will only see what is important for him or her about each offer regardless of the complications in creating and using each offer.

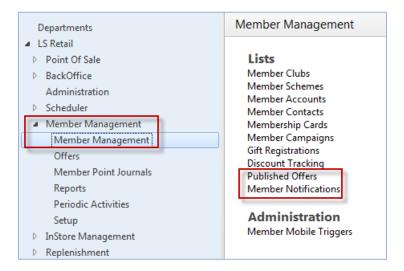
By adding **Published Offers** to the traditional way of displaying offers it can be used not only for smartphones but also as a way to display offers in/on:

- Different types of mobile phones/smartphones
- Pads
- Portals
- As a different way of displaying offers in Stores

The solution is at first mainly developed for smartphones.

In the *Quick Guides* for **Prices** and **Offers**, **Member Management** and **Coupons** there are further information on how offers, member points and coupons are used in LS Nav. Notifications can also be published to club members.

This functionality is available from the LS Retail – Member Management menu at **LS Retail > Member Management > Member Management > Lists > Published Offers/Member Notifications**:



3.1 Overview

All **Offers**, **Store Coupons** and **Member Management** functionality that the LS Nav has available can be used as Published Offers. There are two main categories of offers:

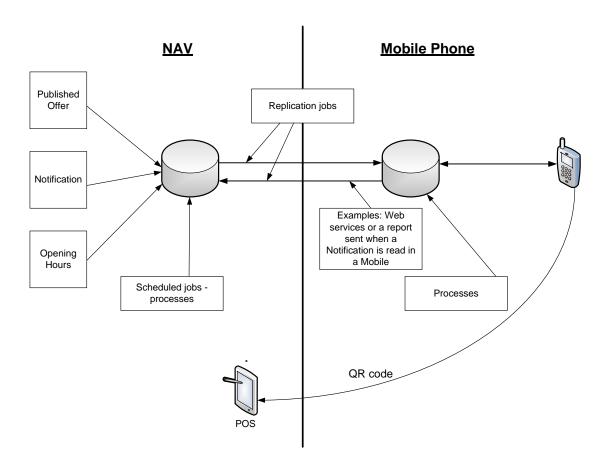
• General offers that are aimed at everyone



• Specific offers that are aimed at special groups or individuals

Using smartphones and similar means to reach the customer gives the opportunity to access him or her with more direct offers than otherwise, aimed at certain people or groups. For instance big spenders that shop a lot in a department store but never visit the sports department might get a coupon sent with an offer that gives him or her 50 Euros discount in the sports department for a purchase of 150 Euros or more. This offer would pursuit a valuable customer that normally buys sportswear and –equipment elsewhere to visit the sports department and possibly become a regular buyer.

The following schema describes the interaction between the NAV system and the Mobile devices.



3.1.1 The Member Offer Trigger Table

The *Member Offer Trigger* table contains information about to whom to display a *Published Offer*. Offer can be published to all club members, to all club members in a certain scheme, to all contacts linked to an account or to a single contact.



The table consists of the following fields:

- **Entry No.** Unique ID, counter.
- **Type**. Type can be: Club, Scheme, Account or a Contact to which the offer is published to.
- **Code**. Code for the Type.
- **Contact No.** Contact Number when the Type is Contact.
- **Trigger Type**. The Trigger Type can be: Offer, Coupon or Notification.
- **Trigger ID**. Code for the Trigger Type.
- **Query Needed**. True checkbox checked if trigging an offer needs to be evaluated (with a query). An example could be the Birthday of a Contact. Not supported in LS Nav 2013.
- **Starting Date**. Starting Date to Display.
- **Ending Date**. Ending Date to Display.
- **Disabled**. Will be set to true when expired.
- **Last Changed**. Date when the record was last changed.
- **Repl. Counter.** Replication Counter.

3.2 Information in the QR Code

The QR code contains a XML document. The Mobile App creates the code when the customer has decided which offers and coupons he or she wants to accept or use. It also contains identification information about the customer.

When the QR-code is scanned at the POS the POS can identify the customer by the Membership Card ID. Then all coupons are registered in the POS like they were scanned individually. Item point offers are also stored in a queue and processed if and when an item is scanned that triggers the offer.

A device user can receive published offers and select them on its device. When the customer has selected the offers and / or coupons the device creates a QR-Code and displays it on the device for scanning. The QR code includes information about the contact in a XML format like this:

For the above information the QR-Code looks like this:



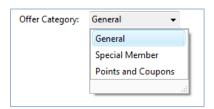


When the QR-Code is processed on the POS then the POS will validate that the QR-code information is still valid. For example if the customer has selected an **Item Point Offer** the POS checks the Point balance. Once a coupon or some points have been used, his/hers account is updated. The QR code will always be linked to the latest information on the user.

3.3 Types of Offers

The different types of offers, the General offers and the Specific offers have different purposes.

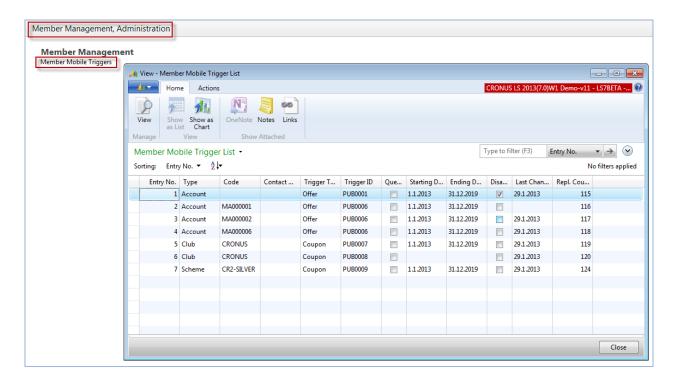
- **General Offers** are offers that are not aimed at a specific group or individuals. They can for instance be promotions for a new product or an offer valid for a very limited time to attract more people to a certain store at some given time or for a given reason.
- **Specific Offers** are always aimed at a special group. It can be aimed at a special:
 - o Club
 - o Scheme
 - Account
 - Contact
- Points and Coupons.



3.4 Mobile Trigger List

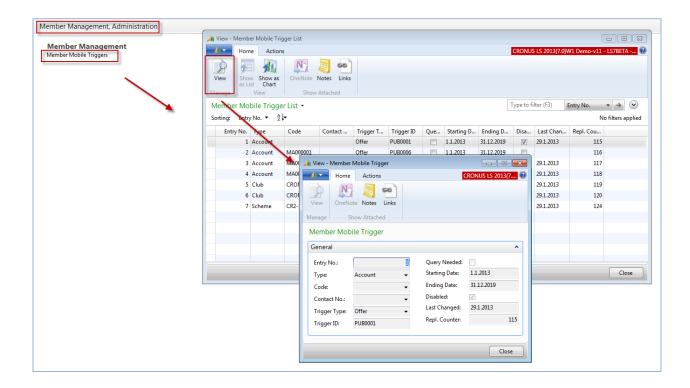
The Mobile Trigger list created by the M_UPDATE_TRIGGERS Scheduler Job, can be viewed at **LS Retail > Member Mgmt > Administration Member Management > Member Mobile Triggers**.





The Job can be run by selecting **Actions/Update Triggers**.

By clicking a selected trigger each of them can be viewed in details.





4 Setting up Mobile Loyalty

4.1 Add to Basket

To activate the option to *Add to Basket* the Retailer has to add data to WI NC Price table by running Create/Update Data for Replication that is also used in *eCommerce*. After adding the data to WI NC Price the data has to be available in PriceToSell in the Mobile Loyalty database by running the M_2Mobile_Norm and/or the M_2Mobile (Action) Job.

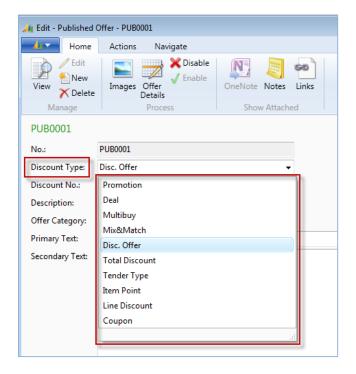
4.2 Published Offer

Since all offers can become *Published Offers* these offers are set up the same way as offers are normally set up within the LS Nav. With the **Published Offer Card** an offer can be registered as a *Public Offer*. It is actually linked to any type of normal offer and text information and pictures can be added.

The following list gives an overview of the offers and coupons that are now in use and all of them can be a part of *Published Offers*:

- **Promotion**. Temporary price change
- **Deal**. Offers sold at special price
- Multibuy. Discount triggered by quantity sold
- Mix & Match. Complex item combinations to give a discount or deal price
- **Disc. Offer**. Appears as discount from regular price
- **Total Discount**. Discount dependent of the total sales amount
- **Tender Type Discount**. Discount dependent of the Tender Type used as payment
- **Item Point**. Price can be paid party by using member points
- Line Discount. Line Discount applied automatically or on user demand
- **Coupon**. Using store coupon for discount or as a part of payment

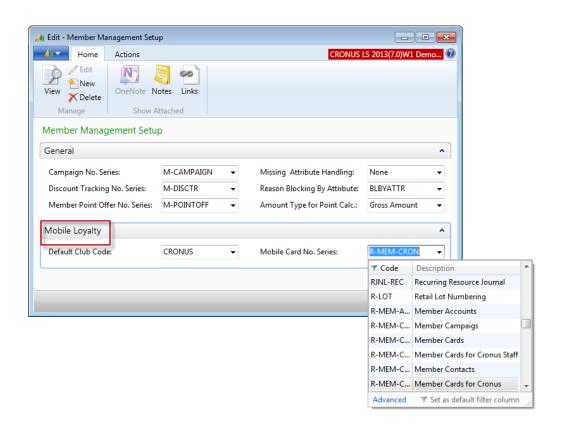




8

In the **Member Management Setup** there are new fields where *Mobile Loyalty* can be set up or edited.

LS Retail > Member Mgmt > Setup > Administration > Member Management Setup





If you want to know which cards are created by mobile devices you can have a separate number series for them set here. If not you can specify the same number series as for other **Membership Cards** (Club or Scheme series).

4.3 Number Series

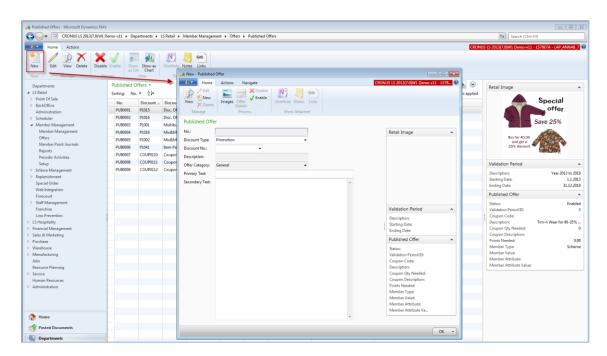
Number Series for Published Offers is set at LS Retail > BackOffice > Sales and Marketing > Pricing > Offers and Coupons > Offers > Additional > Published Offers.

If there is already available a number series for *Published Offers* you will use that, otherwise create a new one in the **Published Offers Nos**.

4.4 Creating a Published Offer

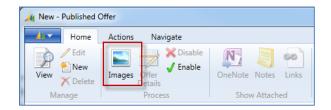
Creating a published offer (chosen from available offers or coupons) is mostly done through the same procedure. Here is an example:

1. Open **LS Retail > Member Management > Offers > Lists > Published Offers** and select the button **New**.



- 2. Select **Discount Type** and **Discount Number**. Only offers and coupons that have already been created can be selected.
- 3. **Primary** (short) and **Secondary** (long) text and an **image** (**Image** button) should then be added to the **Published Offer** which will then be displayed as additional information on the mobile device. Other details can be added as well as more images. This can be useful for showing an item from more than one site for example.



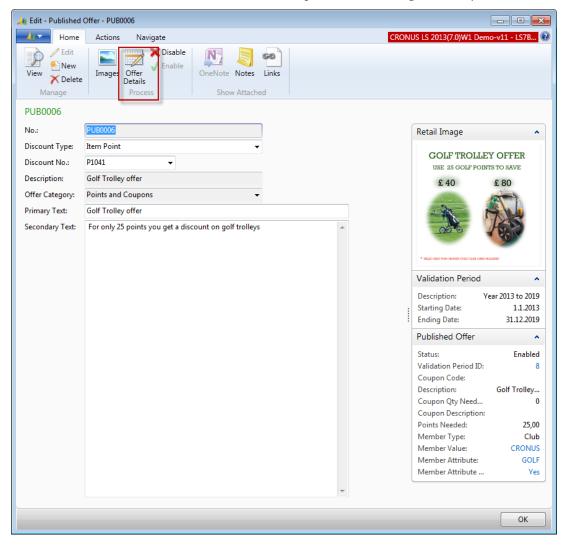


4. Enable the **Published Offer** by pressing Action **Enable**.



Images are stored at separate location to serve as an **Image Library** for the entire system. Documentation for this functionality will be created.

For more details the correspondent button is used. This can be text or extra images showing the item in the offer for instance from different sides. On the right hand side the **Published Offer** Factbox will be visible and there the information about the offer, copied from the original offer/deal can be viewed.





Example:

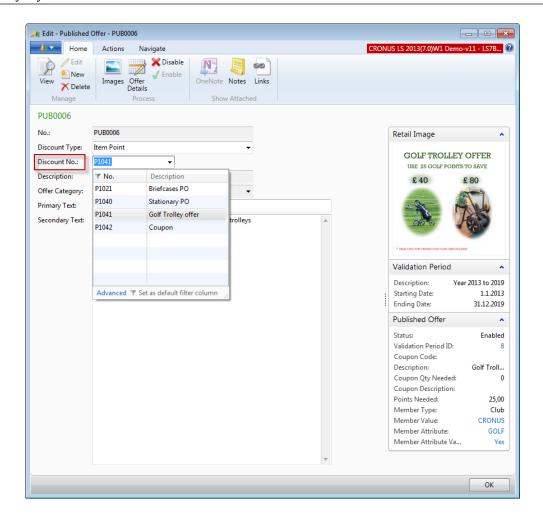
Connect an Item Point Offer to Published Offer:

1. Select **Discount Type = Item Point** and select between **Item Point Offers** in the **Discount No.** field.



- 2. The Published Offers list shows the already existent Published Offers. Each can be edited by double-clicking on them to view them in the editing mode.
- 3. As **Discount Type**, select: **Item Point**.
- 4. Find the right Item Point Offer under Discount No. and select it.





Enable/Disable Published Offers:



You can only Enable a **Published Offer** if the linked **Offer** is *Enabled*. If the linked offer is changed from *Enabled* to *Disabled* the **Published Offer** is set as *Disabled* as well. Disabling an Enabled **Published Offer** will not affect the status of the liked Offer.



To activate new or modified **Published Offers** on a Mobile Device the Job or process M_UPDATE_TRIGGERS must be run and then the data must be pushed to the Mobile Database by running the Data Replication Job M_2MOBILE (or M_2MOBILE_NORM).

4.5 Viewing a List of Published Offers

The list of published offers can be viewed on the same page where they are created, **LS Retail > Member Mgmt > Member Management/Offers > Published Offers**. They can be viewed as a whole or filtered by **Number**, **Discount No.** and **Type** or any other of the options given in the headers of the columns on the page.



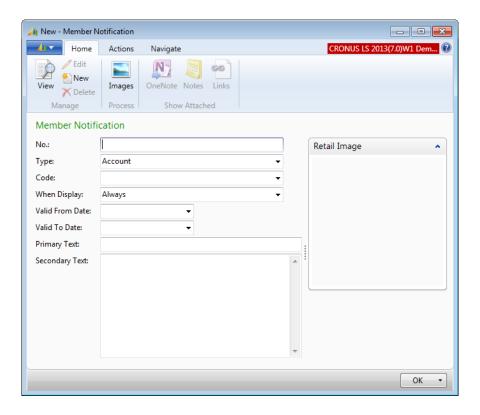


4.6 Member Notifications

It is possible to publish notifications to members from the system. These notifications are managed from the LS Retail > Member Management > Lists > Member Notifications menu.

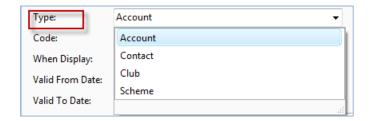
A list of **Member Notifications** is displayed.

To create a new **Notification** press action **New**. A **Member Notification** card is displayed:



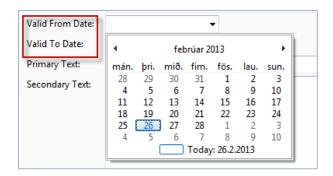
1. Select the **Type** of notification you want to send. The options are: *Account, Contact, Club* and *Scheme*.



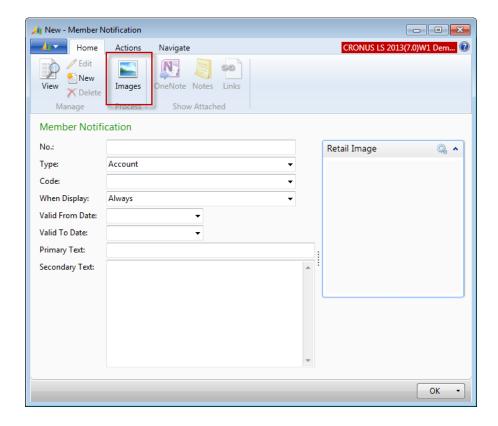


The **Notification** will be visible to the **Member Contacts** (or single contact) that you specify.

- 2. Select **Code**.
- 3. Select **When to Display**. The options are: *Always* and *Once*.
- 4. Select validation period, **Valid From Date** and **Valid To Date**. It can be selected from a calendar.

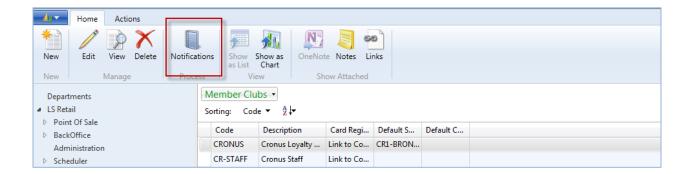


- 5. For **Primary Text** and **Secondary Text** enter text as needed.
- 6. Add an **Image** from the Image Library by selecting the **Image** button.

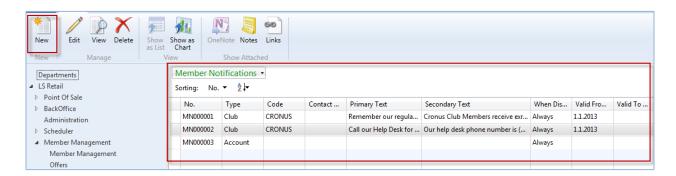




Notifications can also be viewed from the **Member Club** List or Card by pressing the **Notifications** button:



A list of **Notifications** for the selected **Member Club** will be displayed:

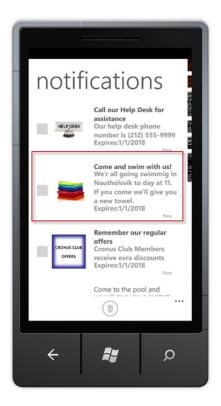


From here you can edit a **Notification** or create new. **Notification** can also be manipulated the same way directly from the **Member Schemes**, **Member Accounts** and **Member Contacts** lists and cards.

To activate new and modified **Notifications** on the Mobile Devices the M_2MOBILE (or M_2MOBILE_NORM) Job must be run.

Once the notification has been sent to the phone it appears there under **Notifications**.





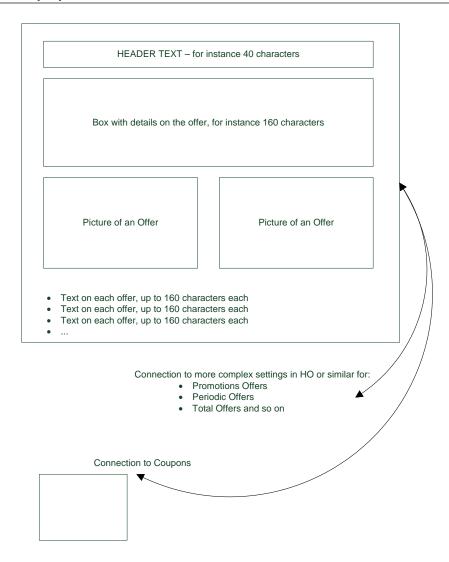
5 Displaying Offers

The main issue when it comes to **Published Offers** is to display the offers in as simple way as possible. Behind the scenes there may be connections with several types of offers and coupon activity but what the user sees is a simplified view that consists most often of:

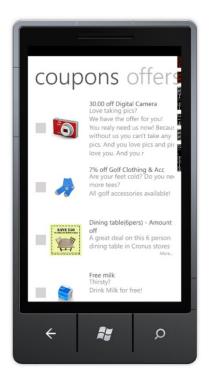
- Header
- Text to describe the offer
- Details on the offer's components
- Picture showing the offer/s

There can be several ways to view the offer, for instance on a smartphone or a webpage but a likely way to display an offer could be like this:











As soon as an offer is filtered it becomes specific.

A simple example of a general offer is 10% discount given on a certain day at a certain store. Specific offers are more complicated and may for instance be linked to attributes in the customer's profile. This gives several options in the future releases. For instance he or she may be a golf enthusiast, thus getting all golf offers, get a special offer on his or hers birthday another aimed at people aged 40-60 years or get a special gender based offer. More information on different offers is in the chapter on *Using Offers*.



6 Using Offers

6.1 Getting Offers

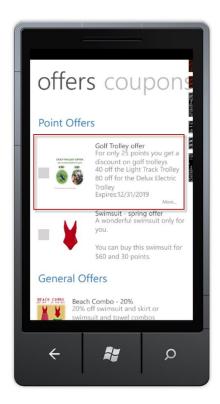
The offers are always pushed to the customer. Each customer can have several offers sent to him to a smartphone. General offers sent to everyone and specific offers aimed at his/hers interest, club, scheme or some attribute in his or hers account, such as age, gender or income will be a part of the future releases. The customer will only see the offers valid for him/her. Thus a member in a silver scheme will not see the offers aimed at the gold members and vice versa. The offers will all look similar in the customer's smartphone/device even though some may be based on usage of points or coupons and others mix and match offers, to name a few.

The customer can in advance decide which offers he or she wants to use. Offers that earlier where activated by prompting a salesperson on the POS to ask a customer whether he or she had a coupon or wanted to use some points as a part of a payment can now be studied, compared and selected wherever the customer chooses.

6.2 When the Customer Needs to Activate an Offer

Some of the offers require active action on the customer's behalf. These include the following:

• When the customers have to decide whether they want to use points to activate an offer



• When the customers have to decide whether they want to use a coupon



6.3 Different kind of Offers and Offers that look identical

The customer can have similar offers displayed and in some cases different offers can look identical for him or her. An example could be one that has the attribute "Golf" linked to his or hers account. The following offers might be available:

- 1. Golf set for 400 Euros and 20.000 points. This is an Item Point Offer, but the customer is only seeing it as an offer that allows him or her to use points.
- 2. Golf set for 150 Euros and 50.000 points. The same applies to this offer as the first one, in the background it is an Item Point Offer.
- 3. Golf set for 400 Euros and a coupon that is valid for 20.000 points. This offer is in fact identical to the first offer but allows the customer to use a coupon instead of using earned points.
- 4. If the customer buys a golf set and a golf trolley together he or she will earn 1000 points and get 10% discount. This can be done as a Mix & Match offer.
- 5. Offer that displays 6 different items for golfers. If the customer buys any 3 of those he or she will only pay for two of them (the two more expensive ones). This is a Mix and Match offer but the customer only sees the header, picture, text and details on the items that the offer covers.
- 6. Coupon that gives 30 Euros discount on all golf items except golf sets if the user buys for 300 Euros or more. In this case the coupon is used plainly as a coupon. The coupon is sent to the customer's smartphone but an earlier version would have been that the customer went to a kiosk to pick up such a coupon or had it sent by mail or found it in a magazine.

Whenever points are used a transaction is booked in the system but what the customer sees is just that the number of the points used is deducted from the number of the points he or she sees as a number in the smartphone or similar equipment.

6.4 Points and Coupons Updated

When the customer has used some points and coupons, gained more points by purchasing some goods or the point and coupon status has changed in some other way the status will be updated in his or hers smartphone/device. For mobile phones this will happen on the mobile side where information is pulled on regular basis from the LS Nav. This may for instance happen every 30 minutes. The update will also take place every time the mobile user logs in again to the mobile loyalty system.



7 Use Case

7.1 Offers for Middle-Aged Golf Enthusiasts

A customer is a member of the Cronus club and has earned membership in the silver scheme of the club. She is aged 45, a golf player and her income is reasonably over the average. On the club's website in her private account she has found out that she can earn points and get discounts, coupons and offers by marking a checkbox for golf enthusiasts.

She is in a large department store taking a look at the offers and coupons she has stored in her smartphone. She finds that she has 14 offers and coupons and she has to activate some of them if she wants to use them. What she does not know is that the origin of the offers is of different kind. They are all displayed in the same manner with a header, text, picture and details of the items included in the offer, fitting perfectly on the smartphone screen.

The origins of the offers are:

Club: 4 offers for the members in the Cronus Club

Scheme: 2 offers for the silver scheme

Account: 4 offers based on the information and choices she has made in her account

General: 4 offers sent to everyone that fulfill certain criteria

When she selects an offer for golf set paying 200 Euros and 40.000 points this offer is a product of her marking the golf checkbox with a "yes". Other criteria such as age or income have no effect on the fact that she gets the offer. However, if she had not marked the checkbox for golf fans, she would get the same offer because of her age and income in a campaign that is being launched for middle aged above average income people that are seen as a feasible group to be encouraged to take up golf.

Chapter 7 - Use Case 24



8 Member Management and Mobile Loyalty

In the User Guides for Member Management and Member Management – Changes and New Features there are further information on how you set up Member Management.

8.1 Mobile Setup steps for the staff in NAV

For information on these issues, see the Member Management Quick Guide LS Retail 6.3.

- Member Management Setup.
- Contact handling for Member Club.
- Account Handling for Member Club.
- Account Schemes.
- Blocking
- Offers
- Coupons

For information on these issues, see Member Management Changes and New Features User Guide LS NAV 2013 (7.1).

- Manual IDs.
- Member Logins Reset Password and Member Device.
- Account type Private.
- Card No. Extended to Text 100.
- Blocking and Reason Codes.

8.2 Customer's Side - Signing up for Mobile Loyalty

On the customer's side certain steps have to be taken in order to create an account to use the **Mobile Loyalty**.

8.3 Creating Mobile Contact

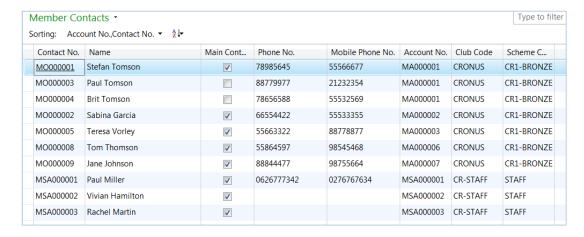
An account is created for the user. The procedure is as follows:

- 1. The user crates a new **Contact**.
- 2. And chooses **Profiles/Member Attributes** for the new **Contact**.
- 3. The **Contact** is linked to a **Device ID** in Back Office.
- 4. And a **Card ID** is also linked to the **Contact**.

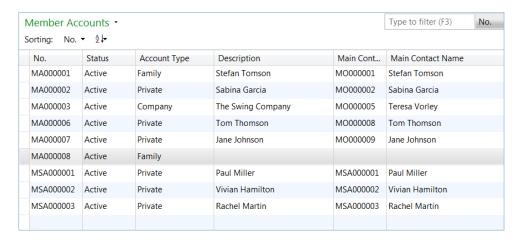
Mobile Users can use several benefits of **Member Management**. And by signing in to **Mobile Loyalty** they get member offers in their mobile Devices.

- 1. Once the account has been created the customer will get a **Device ID** in NAV via Web Service.
- 2. A contact is created in NAV using the Web Service in **LS Retail > Member Management > Member Management > Lists > Member Contacts**.





The contact is linked to an account in NAV at LS Retail > Member Management > Member Management > Lists > Member Accounts.



4. A **Card ID is** created and linked to account and contact in NAV using Web Services at **LS Retail** > **Member Management** > **Member Management** > **Lists** > **Membership Cards**.



5. The **Account** is automatically linked to a Club and a Scheme in NAV though **Mobile Setup**.





- 6. For each **Account** there is one or more **Contacts** in the setup for the CRONUS Club Mobile Loyalty solution.
- 7. After the Customer has been created as a **Contact** and got an **Account** he or she can view the **Published Offers** available on their mobile device.



9 Appendix A: Web Services used for Mobile Loyalty

The following web services have been implemented for the Mobile Loyalty system. They can also be used by other systems or functions:

Request ID	Description	Web Request is Active
MM_MOBILE_CONTACT_CREATE	Mobile Contact Create	Yes
MM_MOBILE_CONTACT_UPDATE	Mobile Contact Update	Yes
MM_MOBILE_CREATE_DEVICE_USER	Mobile User Device Create	Yes
MM_MOBILE_GET_ITEMS_IN_STOCK	Mobile Get Items per Store in Stock	Yes
MM_MOBILE_GET_PROFILES	Mobile Get Attribute Setup	Yes
MM_MOBILE_LOGON	Mobile Logon	Yes
MM_MOBILE_PWD_CHANGE	Mobile Password Change	Yes
MM_MOBILE_PWD_RESET	Mobile Password Reset	Yes
MM_MOBILE_CARD_TO_CONTACT	Link Membership Card to Contact	Yes

This information is available in the **Cronus LS Demo Company**.



10 Appendix B: Jobs

The following table shows the **Jobs** that are generated with WI Default Data page 10012868 that support the replication of data from NAV to the Mobile database. This information is available in the Cronus LS Demo Company.

For further information on the Jobs and Subjobs see the memo file for LS Omni Mobile Loyalty Data Mapping Details LS NAV.

Data Replication:

Job ID	Description
M_2MOBILE	Pushes changes from NAV to the Mobile Database. (By Actions)
M_2MOBILE_NORM	Pushes all relevant data from NAV to the Mobile Database (Normal)
M_TR2_MOBILE	Pushes all Transactions related to members from NAV to the Mobile Database. (Headers, sales lines and payments).
MOB_2_NAV	Pushes all data from the Mobile Database to NAV (Normal). In the version 7 only statistical information about the activities of the mobile user is stored. This is available for later use.

Processes:

Job ID	Description
M_CALC_STORE_HOURS	Calculates opening hours for each store. If opening hours is changed this job must be run
M_UPDATE_TRIGGERS	This job updates the mobile triggers (Member Offer Trigger table). It calculates new triggers and updates the existing ones. This must be run on regular basis to make changes available to the Mobile application.