

# Master Query Forms

Lunch and Learn presented by Abdel Mohammed and Louis Filipow

# Topics of discussion

What is a master query form?

What are the benefits over standard forms?

How is it implemented?

Are there any examples?



# What is a master query form?

- A highly configurable Messenger form that acts as your “one stop shop” for your most commonly used transactions
- Form rules such as disabling certain fields or defaulting fields to a specific value can be accomplished at the form level via form scripts
- When combined with a Message Key (MKE), this can provide intelligent routing to multiple files

# Message Key

- The form is one of two major parts to a master form. The other major part is the Message Key (MKE) which is highly configurable and modifiable in the Configurator module
- Message spawning is a functionality of the switch that can be managed by the MKE which allows the transaction to route to as many endpoints as needed
- Quite frequently with master forms, the MKE has the “key to use” bit checked. At a high level, a key to use MKE operates much differently than a non-key to use MKE because this allows us to route multiple keys to the same file route without having to configure new file routes to the same endpoint



# What are the benefits?

- Simplicity and efficiency by reducing the need to have multiple forms open
- Provides the ability to spawn multiple transactions using the same parameter. The result is responses return with less end-user effort
- Can be done with form and Message Key configurations

# How is it implemented?

- At the GUI level, the master query form is configured using Forms Configurator
- At the switch level, a Message Key (MKE) is configured using Configurator. The form is then linked to the MKE using Forms Configurator
- Message Key contains the rules and fields associated with the form, and is validated at the switch level



# What can a master form look like?

- An example would be the QUERY form in New Mexico. This form will take the data you enter and spawn transactions such as NCIC QW, Nlets DQ, HFS QW, MVD, and Rapsheets.

The screenshot shows a web-based form titled "QUERY - Master Query". The form is organized into several sections with expandable headers:

- Header Data:** Contains a dropdown for "ORI" (set to "NMNSP0012") and a text field for "Control Field" (set to "TEST").
- Vehicle Data:** Contains fields for "License # (LIC)" (set to "ABC123"), "VIN # (VIN)" (empty), "Handicap Placard #", "State (LIS)" (set to "NM = New Mexico"), "License Type (LIT)" (set to "PC = Passenger Automobile"), and "License Year (LIY)" (set to "2021").
- Person Data (Driver history always provided, Photo="Y" also provides driver information and photo):** Contains fields for "Operator's License # (OLN)", "Social Security # (SOC)", "Name (NAM)" (set to "TEST,TEST"), "Race (RAC)" (set to "W = White"), "Date of Birth (DOB)" (set to "19700101"), "State (OLS)" (set to "NM = New Mexico"), "Sex (SEX)" (set to "M = Male"), and "Photo (IMQ)" (set to "Y = Yes").
- To Run CCH from Name, Fill in Reason (REA):** Contains a dropdown for "Purpose (PUR)", a text field for "Attention (ATN)", and a text field for "Reason (REA)".

At the bottom of the form are three buttons: "Submit", "Clear", and "Close".

# QUERY MKE Routing Details

```
QUERY  TYP=Q NBR=149 SLT=589
DTM=2019  4/ 3  8:28
SPC=N DRP=Y CCH=N ACK=N DEL=N SUP=N DQY=N INH=N SFM=Y NIC=N
LSN=N NLT=N KEY=Y ORD=N LEG=N TST=N MPR=N RPR=N
RTE=FILE01  QUERY PRI= 1 CLS= 3 DWN=R RES=R THR=R
RTE=FILE02  QUERY PRI= 1 CLS= 3 DWN=R RES=R THR=R
RTE=FILE03  QUERY PRI= 1 CLS= 3 DWN=R RES=R THR=R
RTE=FILE04  QUERY PRI= 1 CLS= 3 DWN=R RES=R THR=R
RTE=FILE06  QUERY PRI= 1 CLS= 3 DWN=R RES=R THR=R
RTE=FILE08  QUERY PRI= 1 CLS= 3 DWN=R RES=R THR=R
RTE=FILE09  QH      PRI= 1 CLS= 3 DWN=Q RES=Q THR=Q
RTE=FILE10  QUERY PRI= 1 CLS= 3 DWN=R RES=R THR=R
RTE=FILE15  QUERY PRI= 1 CLS= 3 DWN=Q RES=Q THR=Q
RTE=FILE20  QWA     PRI= 1 CLS= 3 DWN=Q RES=Q THR=Q
---1---
NAM      REQ=N SIZ=  30 VAR A&N IDX SPC WDG
INC=FILE01  (ED#0) INC=FILE02  (ED#0) INC=FILE03  (ED#0)
INC=FILE04  (ED#0) INC=FILE06  (ED#0) INC=FILE08  (ED#1)
INC=FILE09  (ED#0) INC=FILE10  (ED#510) INC=FILE15  (ED#0)
INC=FILE20  (ED#0)
```



# What can a master form look like?

- Another example would be the QVEHPER and QPROP master forms in Illinois. These forms will not only spawn multiple transactions, but also let you choose which MKE to choose.

QVEHPER - Vehicle & Person Query Form

\* Message Key ORI  
Z2 = Basic Query

LEADS or NCIC  
Notes LEADS # NCIC # Plate # or Placard SER#

LICENSE PLATE  
License # License State/Region License Year License Type

PERSONAL  
Name Sex Race Date of Birth  
Social Security # Miscellaneous # Driver Image Hotfiles Image Related Search Hit  
N = No Y = Yes N = No  
Driver License # Driver License State/Region Code Arrest Date  
State ID # FBI / UCN # FOID #

VEHICLE  
VIN # OAN # Vehicle Year Vehicle Make

Submit Clear Close

QPROP - Query Property Form

ORI

LEADS or NCIC  
Notes LEADS # NCIC # Hotfiles Image Related Search Hit  
Y = Yes N = No

GUNS  
Serial # Make Caliber

ARTICLES  
Serial/OAN/UAC Type DTE

SECURITIES  
Serial # Denomination Type  
Owner Social Security # Case Number

BOATS  
Boat Hull #/Serial #/OAN Registration # Registration State

Submit Clear Close

# Questions and answers

Is there a limit to how many routes we can add to the message key?

*Nope! We do not have a route limit in our message keys, however we do need to be cognizant of the fact that certain file routes may not accept or expect certain fields to come in, so sending to “all” file routes may not be the best path.*

Can the responses also be sent to another station?

*They can! We can certainly route the responses to a station of your choice. In fact, we can take it a step further and if we needed to have the responses sent to an email address, our switch can do that with the smtp protocol.*

If we send the responses to an email address, is it encrypted?

*It is only encrypted at the the switch level, however if we need to add an extra layer of encryption when sending to an email address this should certainly be possible.*



# Questions and answers

How long will it take to build a master query form and key?

*This entirely depends on what you need the form/key to do. This could range from just a few hours to a few days of work.*

Does the system need to be reset to handle the new master form?

*It does not! In fact, as soon as the form is created, saved, and linked to a message key it will be available to users.*

Can we limit which users have access to the master form?

*Absolutely! This is all done with security roles. As long as the user and station have a security role with the master form configured as an “authorized MKE”, they will see the form.*

Can a form be created that offers the ability to query multiple people?

*Absolutely! We already have some states that have a “batch wanted query” form that allows you to query up to five people at once. In fact, we can even offer this ability for other files such as vehicles, boats, articles, etc.*

# Questions and answers

I am ready for a master form, how do I start?

*You will need to contact your CPI PM so that this request can be formalized for discovery and implementation :D*