

Ituran Integration Users Guide

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Purpose

Phase 2 of the Ituran Integration is focused on Automation. The two main components of this are Syncing the Devices from Ituran into AutoStar and Sending Notification Tones based on Days Past Due.

Syncing the Devices (Device Sync)

Ituran provides Starter Interrupter Devices which are uniquely identified by an IP address. For a given dealer, there will be a list of multiple devices stored on Ituran's system. Devices can be entered into AutoStar manually, but is unnecessary with the Device Sync and will be over written by the automated process. The Device Sync process gathers the list of devices from Ituran and then will Insert new records, Update existing records, or Delete Non-Existing records in AutoStar

Sending Notification Tones (Automated Tones)

Ituran's Devices have several commands including Notification Tones that produce a sound from the device when the vehicle is turned on. The commands for these are:

- Collection Tool Off (Paid)
 - The command abbreviation is CTOFF and no tone is produced when the device is in this mode.
- Collection Tool 1
 - The command abbreviation is CTON1 and a tone is produced when the device is in this mode.
- Collection Tool 2
 - The command abbreviation is CTON2 and a tone greater than CTON1 is produced when the device is in this mode.
- Collection Tool 3
 - The command abbreviation is CTON3 and a tone greater than CTON2 is produced when the device is in this mode.

If the Automated Tones is enabled for a dealer, these tones will be sent based on the Days Past Due setup. Each or the dealer's companies can be configured with three numbers indicating which tone will be sent based on the number of days past due for a given customer. The configuration also allows Promise-To-Pays to be factored into the Days Past Due calculation. If enabled, the Promise-To-Pay date will be taken instead of the Delinquency Date. All other Ituran Commands are sent manually.

Using the Phase 2 Integration

Configuration

The following aspects of the Integration are configurable for each Dealer.

- **Company:** This indicates the dealer's company to which the devices are added. The contract and stock number would then be associated to the device in this company. When a contract is transferred to another of the dealer's companies, the device goes along with it.

- **Ituran Username and Password:** These credentials are used to access Ituran’s system to for both the Device Sync and Automated Tones. The dealer’s admin credentials will allow non-active devices to be synced but all other dealer credentials will only allow active devices to be synced.
- **Use Automated Tones:** This is either True or False, and allows a dealer to choose if they want to use the Automated Tones process. The Device Sync process is always used.
- **Include Promise-To-Pays (PTP):** This is either True or False, and allows a dealer to choose if PTPs will be factored into the Days calculation. If set to True, the Promise-To-Pay Date will considered before the Delinquency Date in calculating which Tone to send. If set to False or there is no PTP Date, then the Delinquency Date will be used to calculate which Tone to send.
- **Tone 1 Days:** This is the number of days after which Tone 1 (CTON1) will be sent.
- **Tone 2 Days:** This is the number of days after which Tone 2 (CTON2) will be sent. This must be greater than Tone 1 Days.
- **Tone 3 Days:** This is the number of days after which Tone 3 (CTON3) will be sent. This must be greater than Tone 2 Days.

Typical Device Flow

1. A Device is added to the Dealer’s account in Ituran’s system. The physical device is added to the vehicle.
2. The **Device Sync** process pulls the device information down into the Dealer’s AutoStar data. The information included in this is the Device IP and the Device Status. The Device Status will also be updated during the Device Sync if it changes in Ituran’s system. (The Device Sync runs once a day beginning at 10 AM Central Time Zone)
3. After a vehicle is Sold or Leased, the Ituran Device is associated with the Contract and Stock Number in AutoStar.
 - a. This is done by the user going to System Utilities → Lookup Maintenance → Ituran Device Maintenance. (See Figure 1)

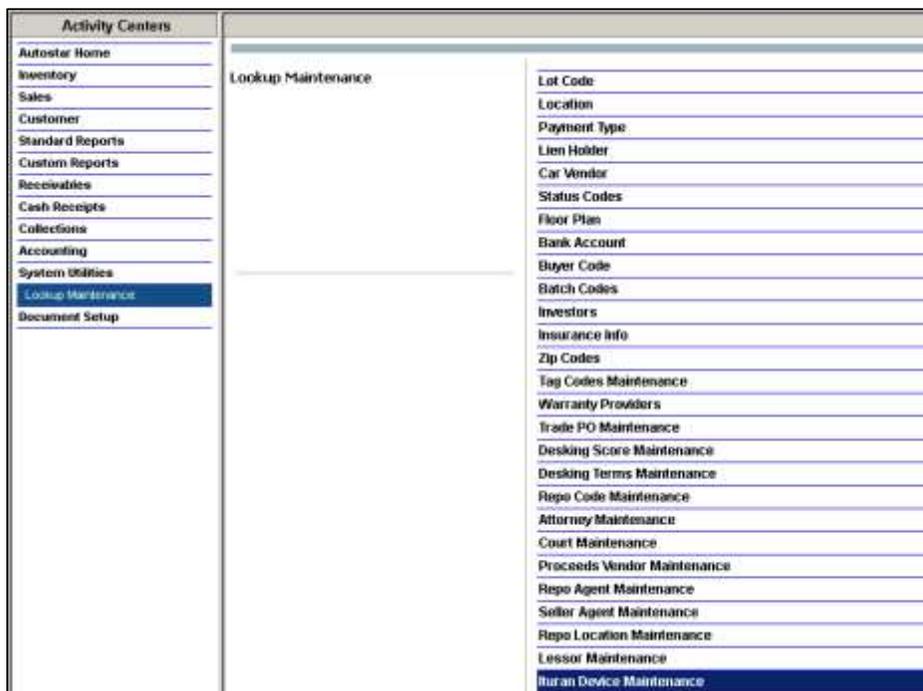


Figure 1: Ituran Device Maintenance Menu

- b. In the Ituran Administration dialog, the specific device is searched for and selected. The user then selects the Edit button and updates the Contract and Stock number. When finished, the user selects Save and the Devices will be linked to the Contract and Stock number. (See Figure 2)

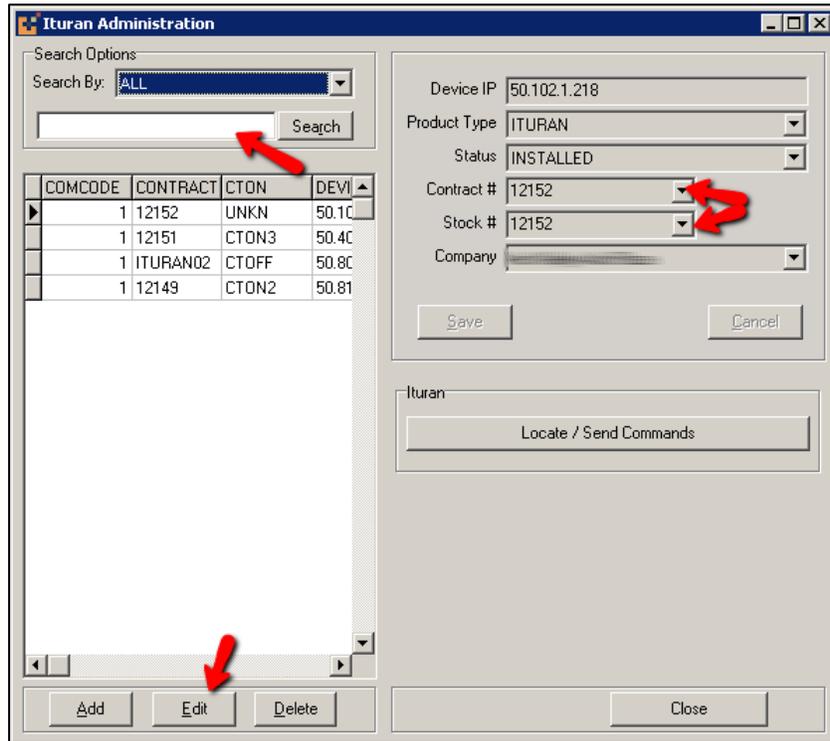


Figure 2: Ituran Administration Dialog

4. The **Automated Tones** process evaluates the Contract using the Configuration options for the dealer to calculate which Tone should be sent (if applicable). Before sending a Tone, the current Tone/Command Status is checked in Ituran's system. If the current Tone/Command Status is the same as the calculated Tone, then the Tone is not sent. Also, if the current Tone/Command status is the Starter Interrupter Enabled (Vehicle Disabled), then the calculated Tone is not sent. Lastly, if the current Tone/Command status is unknown, the calculated Tone is not sent. Otherwise, the Automated Tones process will attempt to send the calculated Tone. If a connection timeout or other certain known issues prevent the tone from being sent, then the tone will be resent for a total of 3 attempts. (The Automated Tones process runs once a day immediately following the Device Sync process)
5. Every 15 minutes, devices in a status of CTON1, CTON2 or CTON3 are checked to see if a Payment (or PTP if enabled) has been made since the last time the Contract was evaluated. If one has been made, the CTOFF command is sent and will be the status until the Contract/Device is evaluated the next day. This is the Check Payments process, a sub-process of the Automated Tones process.
6. If a Contract is transferred to another company in the Dealer's AutoStar system, the Device follows it and the Device Sync and Automated Tones continue to work.
7. If a device is removed from Ituran's System, it will also be removed from AutoStar by the Device Sync process.
8. If a device needs to be moved to another Vehicle, then the Contract and Stock number can be changed through the Ituran Administration Dialog.
9. If a device needs to be disassociated with a Contract and Stock number, then the device can be deleted through the Ituran Administration Dialog. Then the Device will be added back without the Contract and Stock number by the Device Sync process. If the original contract was transferred into another company, the device is added back to the original company

The AutoStar integration with Ituran has been updated with the following changes:

- The new User Defined Fields in Ituran are utilized to tie a Device to a Vehicle/Contract in AutoStar. Changes in both Ituran and AutoStar are identified and synced by taking the last change observed, with the Ituran values winning on a tie. The User Defined Fields are used as follows:
 - UserDefined1: Ties to CONTRACT in AutoStar, a VARCHAR(8) field.
 - Null (empty) values are OK and represent a device on an unsold vehicle
 - If unsold vehicle is sold, this value is updated to match the CONTRACT. Value may be set in either AutoStar or Ituran as well.
 - UserDefined2: Ties to STOCKNO in AutoStar, a VARCHAR(8) field.
 - Null (empty) values are OK and represent a device not yet associated with a vehicle
 - This value must be set either in AutoStar or Ituran
 - UserDefined3: Ties to COMCODE (Company Code) in AutoStar, an INTEGER field.
 - Null values will be set to the default Company Code set on the dealer's integration record
 - This value can be set from Ituran, but not manually changed in AutoStar
 - If a contract is transferred to another company within the dealer's database or a contract is amended to a new contract, the User Defined Fields are updated to match the new values in AutoStar
 - Changes to these values are checked for valid values when updating AutoStar. If any of the 3 values is invalid, the update/insert will fail.
- Improved validation of codes has been added to prevent Tone values being missed due to the device being out of range of cellular towers
- Broken Promise To Pays (PTP) now default to the calculated tone
 - The Days calculation used to calculate off the PTP Date, so a broken PTP would not initiate a command until the set days had passed.
 - Now the Days calculation will use the Delinquency Date if the PTP is broken
- Performance improvements have been implemented to ensure more timely commands.

If any issues are noticed in the next few days please report them to AutoStar tech support

(support@autostarsolutions.com) and provide as much information as possible (i.e. Device IP, Observed Issue, Date of Issue, Desired Result, etc.)

FAQ

If they use Ituran device maintenance to link a device to Autostar before its sold and only put a stock number. When the vehicle is sold, does the contract automatically get updated or they need to come back to that screen and put in the contract number?

It is done automatically when the car is sold

2. If I start with stock number 123, then I get refinanced and the system generates a new stock number 456. Does the Ituran maintenance area get updated to that new number? Or do you have to go back and update it?

If the contract is amended then the device follows the active contract.

3. Their past due dates for collection tool are set for CT1 at 16 days, CT2 at 17 days and CT3 at 18 days. What if they have a client that was due on 7/1, who called on 7/14 and said, hey I can't make a payment until I get my next check on 8/1, and automaxx said fine, we will set your promise to pay for 8/1. Now its 8/2 and they didn't pay. Will the collection tool alarm get sent? or will it wait 16 days to be past due?

There is a setting to consider the PTPs or not. If they are considered, a future promise to pay will set the device not to beep, if the promise is broken then it will base the tone on the delinquency date

4. As new units are installed, how often is the unit list under Ituran device maintenance updated?

New devices are synced 4 times a day 6AM, 11AM, 4PM, 8PM

5. As payments are processed, how often are the paid commands sent?

Almost every 15 minutes. There are a few windows throughout the day where it does not check. These windows are there to allow the other automated processes run without conflicts.

6. If they send a manual starter disable command and a client makes a partial payment, the account is still past due and nothing changes, however, if payment is made in full, the paid command should be send from autostar and the vehicle enabled. Correct?

Correct