

# DownloadReplayData : Operations Guide

## v01 –2013-11-4

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### 1 Overview

Anyone using MarketReplay on NinjaTrader 7 (NT7) knows that before MarketReplay can be used to replay a particular day, Replay files (either L1 or L2) have to be downloaded on the local machine.

For many reasons, NinjaTrader 7 offers a limited capability to download these files from their server – one needs to manually select the instrument, the date, which of the L1 and/or L2 files is to be downloaded, then hit OK and wait patiently for that (or those 2) file(s) to be downloaded.

Downloading another day of Replay data for the same instrument – or another one – requires to go again through these steps. After a while, this becomes very annoying.

**DownloadReplayData** is a small utility for NinjaTrader 7 which allows to download a set of dates for a specific instrument (or list of instruments), in an automated manner. As will be seen, this automation replicates all the steps done previously manually – including the wait time, and uses NinjaTrader 7 native Replay data download capability.

**DownloadReplayData** comes in the form of a Strategy, and executes all of its duties in its OnStartup() method. As a result, it is advised to use it from the Strategy Analyzer window, when no other Strategy is actively trading the market.

**DownloadReplayData** is *payware* (one-time fee of \$50).– I am asking for a small fee to enable its automation capability, beyond downloading a single day.

## 2 Installing DownloadReplayData

The system is provided as a compiled NinjaScript, which must be imported in NinjaTrader using:

**File / Utilities / Import Ninjascript ...**

## 3 Using DownloadReplayData

The entire process is very simple:

1. Open a Strategy Analyzer window (**File / New / Strategy Analyzer ...**)
2. In the left pane, select the instrument on which Replay data is to be downloaded (note: if an instrument list is selected, instead of a single instrument, DownloadReplayData will run for each instrument of that instrument list, one at a time).  
In the example below, ES 12-13 is the selected instrument.

The screenshot displays the Strategy Analyzer interface for the 'DownloadReplayData' strategy on the 'ES 12-13' instrument. The main window is titled 'DownloadReplayData - ES 12-13 - Strategy Analyzer'. The left pane shows a tree view of instruments, with 'ES 12-13' selected. The central pane shows a 'Summary' tab with a table of performance metrics. The right pane shows the 'Parameters' configuration for the strategy.

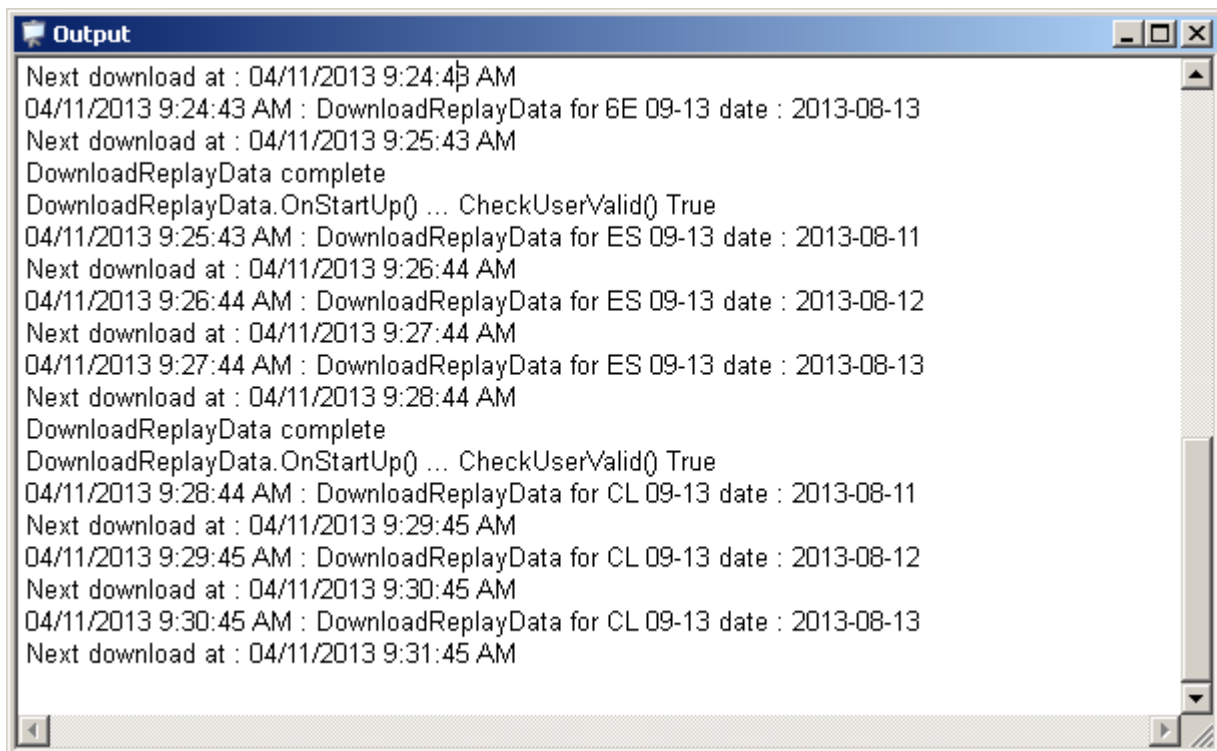
Performance	All Trades	Long Trades	Short Trades
Total Net Profit	\$0.00	\$0.00	\$0.00
Gross Profit	\$0.00	\$0.00	\$0.00
Gross Loss	\$0.00	\$0.00	\$0.00
Commission	\$0.00	\$0.00	\$0.00
Profit Factor	1.00	1.00	1.00
Cumulative Profit	0.00%	0.00%	0.00%
Max. Drawdown	0.00%	0.00%	0.00%
Sharpe Ratio	1.00	1.00	1.00
Start Date	01/01/2013		
End Date	02/11/2013		
Total # of Trades	0	0	0
Percent Profitable	0.00%	0.00%	0.00%
# of Winning Trades	0	0	0
# of Losing Trades	0	0	0
Average Trade	0.00%	0.00%	0.00%
Average Winning Trade	0.00%	0.00%	0.00%
Average Losing Trade	0.00%	0.00%	0.00%
Ratio avg. Win / avg. Loss	0.00	0.00	0.00
Max. consec. Winners	0	0	0
Max. consec. Losers	0	0	0
Largest Winning Trade	0.00%	0.00%	0.00%
Largest Losing Trade	0.00%	0.00%	0.00%
# of Trades per Day	0.00	0.00	0.00
Avg. Time in Market	0.0 min	0.0 min	0.0 min
Avg. Bars in Trade	0.0	0.0	0.0
Profit per Month	0.00%	0.00%	0.00%
Max. Time to Recover	0.00 days	0.00 days	0.00 days
Average MAE	0.00%	0.00%	0.00%
Average MFE	0.00%	0.00%	0.00%
Average ETD	0.00%	0.00%	0.00%

The right pane shows the 'Parameters' configuration for the 'DownloadReplayData' strategy:

- Parameters:**
  - DateFrom: 03/11/2013
  - DateTo: 03/11/2013
  - DownloadSpacing: 60
  - Level1Data: True
  - Level2Data: False
  - Userid: 44A5BD350074B8A8704B
  - UserValidation: (empty)
- Data series:**
  - Price based on: Last
  - Type: Minute
  - Value: 1
- Time frame:**
  - From: 01/01/2013
  - To: 02/11/2013
  - Session template: <Use instrument settings>
- General:**
  - Include commission: True
  - Label: DownloadReplayData
  - Maximum bars look back: TwoHundredFiftySix
  - Min. bars required: 20
- Historical Fill Processing:**
  - Fill type: Default
  - Slippage: 0
- Order Handling:**
  - Entries per direction: 1
  - Entry handling: AllEntries
  - Exit on close: True
- Order Properties:**
  - Set order quantity: by strategy
  - Time in force: Gtc

At the bottom of the right pane, there is a 'Run Backtest' button.

3. Configure DownloadReplayData parameters:
  - a. **DateFrom** : the 1<sup>st</sup> date to be downloaded
  - b. **DateTo** : the last date to be downloaded
  - c. **DownloadSpacing**: this is the wait time in-between downloads – by default it is set to 60 seconds, which should be long enough for most users, it can be shortened **\*but\*** if too low, the next download won't be executed, and the usual error message :  
"Error on downloading replay data: Connection to data server is busy or not available right now. Please try again later" will pop-up.
  - d. **Level1Data / Level2Data**: allows the user to choose which Replay data files are to be downloaded, either L1 (bid / ask) or L2.
  - e. **Userld**: is automatically generated by the software, and tied to the current machine – it is not user configurable
  - f. **UserValidation**: is for the UserValidation data string, which enables the multi-days automation (cf. 4).
4. To start the automated download, click "Run Backtest" – sit back & relax (as this process uses NT7 user interface, it is better to leave NinjaTrader alone during that time).
5. While DownloadReplayData is working, the Output window provides information re. the current state of affairs :



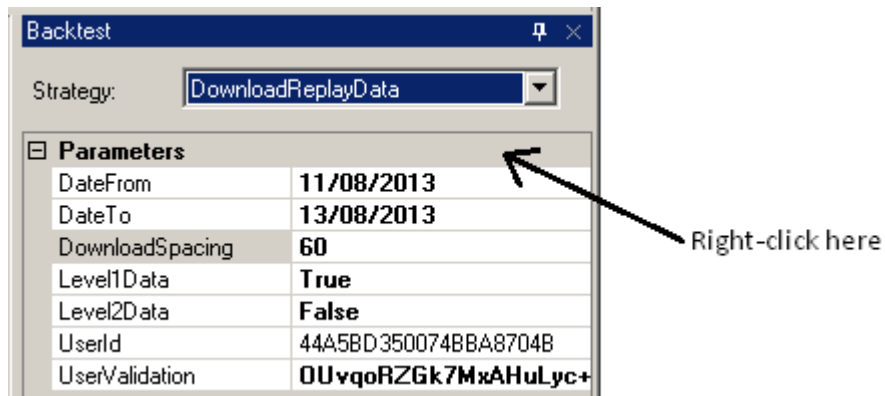
```

Output
Next download at : 04/11/2013 9:24:43 AM
04/11/2013 9:24:43 AM : DownloadReplayData for 6E 09-13 date : 2013-08-13
Next download at : 04/11/2013 9:25:43 AM
DownloadReplayData complete
DownloadReplayData.OnStartup() ... CheckUserValid() True
04/11/2013 9:25:43 AM : DownloadReplayData for ES 09-13 date : 2013-08-11
Next download at : 04/11/2013 9:26:44 AM
04/11/2013 9:26:44 AM : DownloadReplayData for ES 09-13 date : 2013-08-12
Next download at : 04/11/2013 9:27:44 AM
04/11/2013 9:27:44 AM : DownloadReplayData for ES 09-13 date : 2013-08-13
Next download at : 04/11/2013 9:28:44 AM
DownloadReplayData complete
DownloadReplayData.OnStartup() ... CheckUserValid() True
04/11/2013 9:28:44 AM : DownloadReplayData for CL 09-13 date : 2013-08-11
Next download at : 04/11/2013 9:29:45 AM
04/11/2013 9:29:45 AM : DownloadReplayData for CL 09-13 date : 2013-08-12
Next download at : 04/11/2013 9:30:45 AM
04/11/2013 9:30:45 AM : DownloadReplayData for CL 09-13 date : 2013-08-13
Next download at : 04/11/2013 9:31:45 AM
  
```

## 4 Validating DownloadReplayData

To enable the multi-days automation:

1. Pay the small fee (\$50) through PayPal to [dominique.normand@gmail.com](mailto:dominique.normand@gmail.com) ; include with your payment transaction the UserId found in the strategy parameters
2. Upon receipt of your payment, I will email back your UserValidation data, which must be copied/pasted exactly to the UserValidation field.
3. In order to keep that UserValidation data configured, right click on the grey line "Parameters":



4. A pop-up a window with 1 item : **Set Default For DownloadReplayData**, will appear, click on that item, et voila.