

FeedOS™ Developer's Notice

CTA – Feed Update

Reference n°: 20141118 – 19927 – 22974

Effective as of: 08 December 2014*

Action required from users: MANDATORY ACTION



* For the actual day when the changes to your custom feed handler take effect, please contact your QuantFEED® project manager.

S&P Capital IQ Real-Time Solutions
FeedOS™ Developer's Notice: CTA – Feed Update
Reference 20141118 – 19927 – 22974
November 24, 2014

France Offices

52 Rue de la Victoire
75009 Paris
France
Tel: +33 (0) 1 73 02 32 11

US Offices

55 Water Street, 44th floor
New York, NY 10041
United States of America
Tel: +1-(212)-438-4346

130 East Randolph
One Prudential Plaza, Suite 2900
Chicago, IL 60601
United States of America
Tel: +1-(312)-233-7129

UK Office

20 Canada Square
Canary Wharf
London E14 5LH
United Kingdom
Tel: +44 (0) 203 107 1676

Singapore Office

12 Marina Boulevard
#23-01 Marina Bay
Financial Centre Tower 3
Singapore 018982
Tel: +65 6530 6546

www.capitaliq.com

Copyright © 2014 by Standard & Poor's Financial Services LLC, a part of McGraw Hill Financial.

All rights reserved. S&P CAPITAL IQ is a trademark of Standard & Poor's Financial Services LLC. STANDARD & POOR'S, S&P, GLOBAL CREDIT PORTAL and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.



UPDATE OF THE CTA MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on the CTA market data stream, S&P Capital IQ Real-Time Solutions has decided to enhance the content of FeedOS.

This developer's notice contains late-breaking information about the implementation of this modification in your applications, which may not be included otherwise in the published documentation. The topics this notice covers include:

- [1. Update Summary](#)
- [2. FeedOS Technical Implementation](#)
- [3. Finding the Latest Information.](#)

1. Update Summary

Table 1 Current update summary

Notice Reference	20141118 – 19927 – 22974
Exchanges	CTA
Concerned MICs	ARCX, BATS, BATY, CBSX, EDGA, EDGX, XADF, XASE, XBOS, XCHI, XCIS, Xcta, XISX, XNAS, XNYS, XPHL
Internal Source ID	119, 121, 122
Effective Date	2014-12-08*
Impact	<ul style="list-style-type: none">• Update of the Referential Tags• Update of the Measurement Unit in the BBO of the Level1 Market Data
Action required	MANDATORY ACTION – see section 2.2. Changes to the BBO of the Level1 Market Data – Measurement Unit.

2. FeedOS Technical Implementation

Effective Monday, **December 08^{*} 2014**, S&P Capital IQ Real-Time Solutions enhances the referential data and changes the BBO of the Level1 Market Data to accommodate the new information disseminated on the CTA market data stream, as described below:

- [2.1. Changes to the Referential Data](#)
- [2.2. Changes to the BBO of the Level1 Market Data – Measurement Unit.](#)

2.1. Changes to the Referential Data

S&P Capital IQ Real-Time Solutions **introduces** the referential tags below to accommodate the information disseminated on the CTA market data stream:

Table 2 Referential tags added on the CTA market data stream

Tag Name	Numeric ID	Type	Applicable to
SecurityStatus	965	UInt8	ARCX, XNYS
PriceIncrement_dynamic_TableId	9522	UInt32	ARCX, BATS, BATY, CBSX, EDGA, EDGX, XADF, XASE, XBOS, XCHI, XCIS, Xcta, XISX, XNAS, XNYS, XPHL

2.1.1. SecurityStatus

The values of the referential tag **SecurityStatus** conveyed on the CTA market data stream are disseminated via FeedOS data stream in *Referential* to indicate the status of an instrument.

FeedOS implementation of the values currently available for the tag **SecurityStatus** is described in the table below:

Table 3 SecurityStatus – technical implementation in FeedOS

Component	Value	Description
Tag Name	SecurityStatus	FeedOS tag name.
Numeric ID	965	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	UInt8	UInt8 data type.
Format	<i>[Exchange specific value]</i>	An exchange specific value , indicating the status of an instrument.
Possible Values	1	Active (Default value)
	2	Inactive
	3	Suspended

* This is the proposed day for the update of the standard version of the feed handler. For dedicated feed handlers, this date may differ. For the actual day when the changes to your custom feed handler take effect, please contact your QuantFEED® project manager.

2.1.2. PriceIncrement_dynamic_TableId

The values of the referential tag **PriceIncrement_dynamic_TableId** conveyed on the CTA market data stream are disseminated via FeedOS data stream in *Referential* to specify the table detailing the price increments for an instrument.

FeedOS implementation of the values currently available for the tag PriceIncrement_dynamic_TableId is described in the table below:

Table 4 PriceIncrement_dynamic_TableId – technical implementation in FeedOS

Component	Value	Description
Tag Name	PriceIncrement_dynamic_TableId	FeedOS tag name.
Numeric ID	9522	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	UInt32	UInt32 data type.
Format / Possible Values	<i>[Exchange specific value]</i>	An exchange specific value , specifying the table that details the price increments for an instrument.

Referential Data Sample

Below is an example showing the current implementation of the newly added (in green) referential tags:

```
instr # 157/7506 = 329260370
  PriceCurrency      string{USD}
  Symbol            string{GRP/U}
  Description        string{Granite Real Estate Inc. Stapled Units, each consisting
of one unit of Granite Real Estate Trust and one common share of Granite REIT Inc.}
  SecurityType      string{MF}
  FOSMarketId       EDGX
  CFICode           string{EUXXXX}
  RoundLot          float64{100}
  SecurityStatus     uint8{2}
  InternalCreationDate Timestamp{2013-12-09 16:24:40:754}
  InternalModificationDate Timestamp{2014-11-21 07:00:17:132}
  InternalSourceId   uint16{119}
  InternalEntitlementId CTA
  LocalCodeStr       string{GRP/U}
  ForeignFOSMarketId XNYS
  PriceIncrement_dynamic_TableId uint32{3342436}
  OperatingMIC       string{EDGE}
  SegmentMIC         string{EDGX}

[...]
```

```
TABLE # 3342436
> 0 : 0.0001
>= 1 : 0.01
```

2.2. Changes to the BBO of the Level1 Market Data – Measurement Unit

Before the migration day, the Bid and Ask quantities were not multiplied by RoundLot. After the migration day, the Bid and Ask quantities are multiplied by RoundLot, as shown below:

Caution The RoundLot value affects only the quotation quantity, but not the value disseminated by the tag LastTradeQty.

** BEFORE 2014-12-08 **

```
instr # 157/7506 = 329260370
  PriceCurrency      string{USD}
  Symbol             string{GRP/U}
  Description         string{Granite Real Estate Inc. Stapled Units, each consisting
of one unit of Granite Real Estate Trust and one common share of Granite REIT Inc.}
  SecurityType       string{MF}
  FOSMarketId        EDGX
  CFICode            string{EUXXXX}
  RoundLot           float64{100}
[...]
```

NORMAL TRADE

```
TE 14:29:53:165 329260370 34.7 100 * * * *
```

```
MARKET_CTA_SaleCondition==T-
```

```
VU 14:29:53:165 329260370 LastPrice=?
```

```
TE 14:30:00:084 329260370 * * 18.43 1 ! 0
```

```
TE 14:30:00:084 329260370 * * * * 43.22 1
```

ODD LOT TRADE

```
TE 17:28:56:921 752887144 2.16 60 * * * *
```

```
MARKET_CTA_SaleCondition==F-I
```

```
VU 17:28:56:921 752887144 LastPrice=2.14
```

```
TE 17:28:56:923 752887144 * * * * 2.19 8
```

** AFTER 2014-12-08 **

```
instr # 157/7506 = 329260370
  PriceCurrency      string{USD}
  Symbol             string{GRP/U}
  Description         string{Granite Real Estate Inc. Stapled Units, each consisting
of one unit of Granite Real Estate Trust and one common share of Granite REIT Inc.}
  SecurityType       string{MF}
  FOSMarketId        EDGX
  CFICode            string{EUXXXX}
  RoundLot           float64{100}
[...]
```

NORMAL TRADE

```
TE 14:29:53:165 329260370 34.7 100 * * * *
```

```
MARKET_CTA_SaleCondition==T-
```

```
VU 14:29:53:165 329260370 LastPrice=?
```

```
TE 14:30:00:084 329260370 * * 18.43 100 ! 0
```

```
TE 14:30:00:084 329260370 * * * * 43.22 100
```

ODD LOT TRADE

```
TE 17:28:56:921 752887144 2.16 60 * * * *
```

```
MARKET_CTA_SaleCondition==F-I
```

```
VU 17:28:56:921 752887144 LastPrice=2.14
```

```
TE 17:28:56:923 752887144 * * * * 2.19 800
```

3. Finding the Latest Information

For the latest documentation and product updates, additional support and training, please contact our support services:

- E-mail: rts-support@spcapitaliq.com
- Web: <http://support.quanthouse.com>.