



Building The Energy Markets of Tomorrow . . . Today

ICAP Security

Technical Conference #1

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Michael Stahl, Technical Lead



Agenda

- **Security Overview**
- **Security Configuration**
- **Authentication/Authorization**
- **Upload/Download**
- **Data Security**
- **Questions**

Security Overview

- **Architecture consists of industry-standard technologies and methodologies.**
 - ✓ *Off-the-shelf products from segment-leading vendors*
 - ✓ *All products on fully supported releases*
- **The application resides on servers that are protected both physically and electronically**
- **The servers sit behind an electronic firewall and are not connected directly to the internet.**

Security Overview

- **Digital Certificates required**

- ✓ This is an important first line of defense to identify authorized users of this and other NYISO applications.
- ✓ Refer to Tech Bulletin #1
 - http://www.nyiso.com/services/documents/techbulletins/tb_001.pdf

- **Cookies must be enabled in your browser**

- **Passwords must be changed for existing accounts**

- ✓ *Necessary piece of Security Infrastructure upgrade*
- ✓ *New accounts will be handled automatically*
- ✓ *This can be done by the User or by the MP Administrator*

Security Configuration

- **ICAP application extends existing MIS user and organization repository**

- **Customer Relations Department (CRD) will still be responsible for creating Organizations and MP Administrator accounts**

- **MP Administrators will create and maintain their own User accounts for their Organization through MIS Bidding and Scheduling application**
 - ✓ *Refer to the Market Participant User Guide*
 - http://www.nyiso.com/services/documents/manuals/pdf/admin_manuals/mpug_mnl.pdf

Security Configuration

Privileges

DAM Generators	HAM Generators	Physical Load	Virtual Load	Virtual Supply	DAM Transactions
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HAM Transactions	Non-Firm Transactions	TCC	ICAP	Update UC Data	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

ICAP-related Privileges

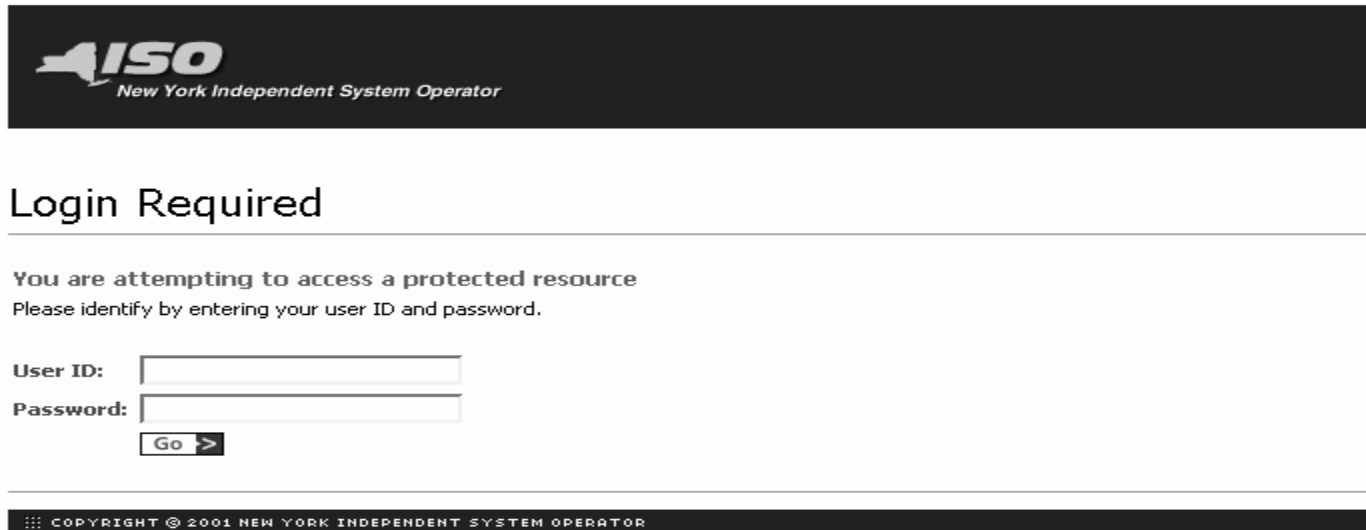
Bid To Purchase	Offer To Sell	Certify	DMNC	Maintain T.O. Data
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- **CRD will set ICAP active flag for Organizations**
- **CRD will set ICAP-related privileges on Organizations**
 - ✓ *When enabled, these flags grant write access to their associated modules*
 - ✓ *Only relevant flags will be active for an Organization*

Security Configuration

- **MP Administrators will need to set the ICAP active flag for all users that need access to application.**
- **MP Administrators can control write-access through new flags on Organization maintenance page.**
 - ✓ *The Organization must also have this permission before a User can be granted a privilege.*

Authentication



ISO
New York Independent System Operator

Login Required

You are attempting to access a protected resource
Please identify by entering your user ID and password.

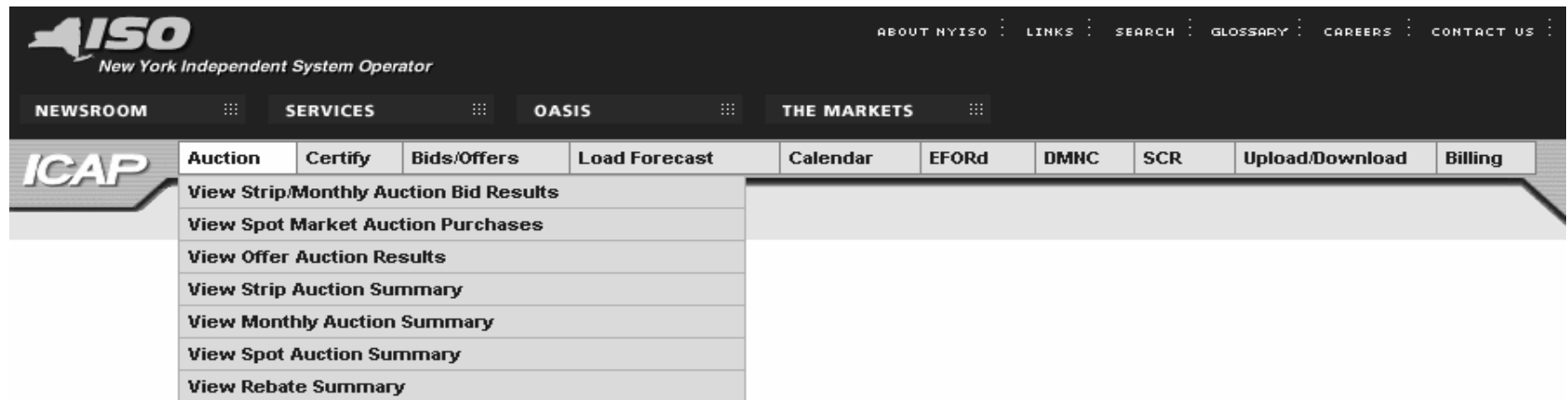
User ID:

Password:

⋮ COPYRIGHT © 2001 NEW YORK INDEPENDENT SYSTEM OPERATOR

- ***Any attempt to access protected resource will be redirected to this login screen***
- ***Public pages will not force you to login***

Authorization



- **Generated dynamically based on credentials of user who is logged in.**
- **Not designed to be sole source of resource security.**
 - ✓ *Authorization rules will be applied to any attempt to reach resource within ICAP application.*

Upload Download

- **The username and password embedded in the template is used for authentication and authorization.**
 - ✓ *This happens even if you have already logged in through the web interface.*
- **Sample Template**

```
TRAN_TYPE=UCAP_DOWNLOAD_BID&  
USERID=mstahl&  
PASSWORD=ucap&  
AUCTION_TYPE=strip&  
AUCTION_MONTH_YEAR=11/2008&  
BID_MONTH_YEAR=11/2008&
```

Data Security

- All communications with the ICAP application will be through a Secure Socket Layer (SSL), which automatically encrypts all data.
- Normal expectations of privacy are consistent with other applications.
 - ✓ *A Market Participant's data cannot be viewed by other Market Participants*

Questions
