New gTLD Pre-Delegation Testing (PDT)

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Agenda

+ PDT Overview
+ How to Prepare for PDT
+ Lessons Learned from the PDT Pilot
+ Q & A
+ PDT Tutorial
+ Resources & Information

Overview
Where PDT Fits in the New gTLD Process

Prerequisites for PDT

+ Signed Registry Agreement

+ Production-Ready System & Infrastructure

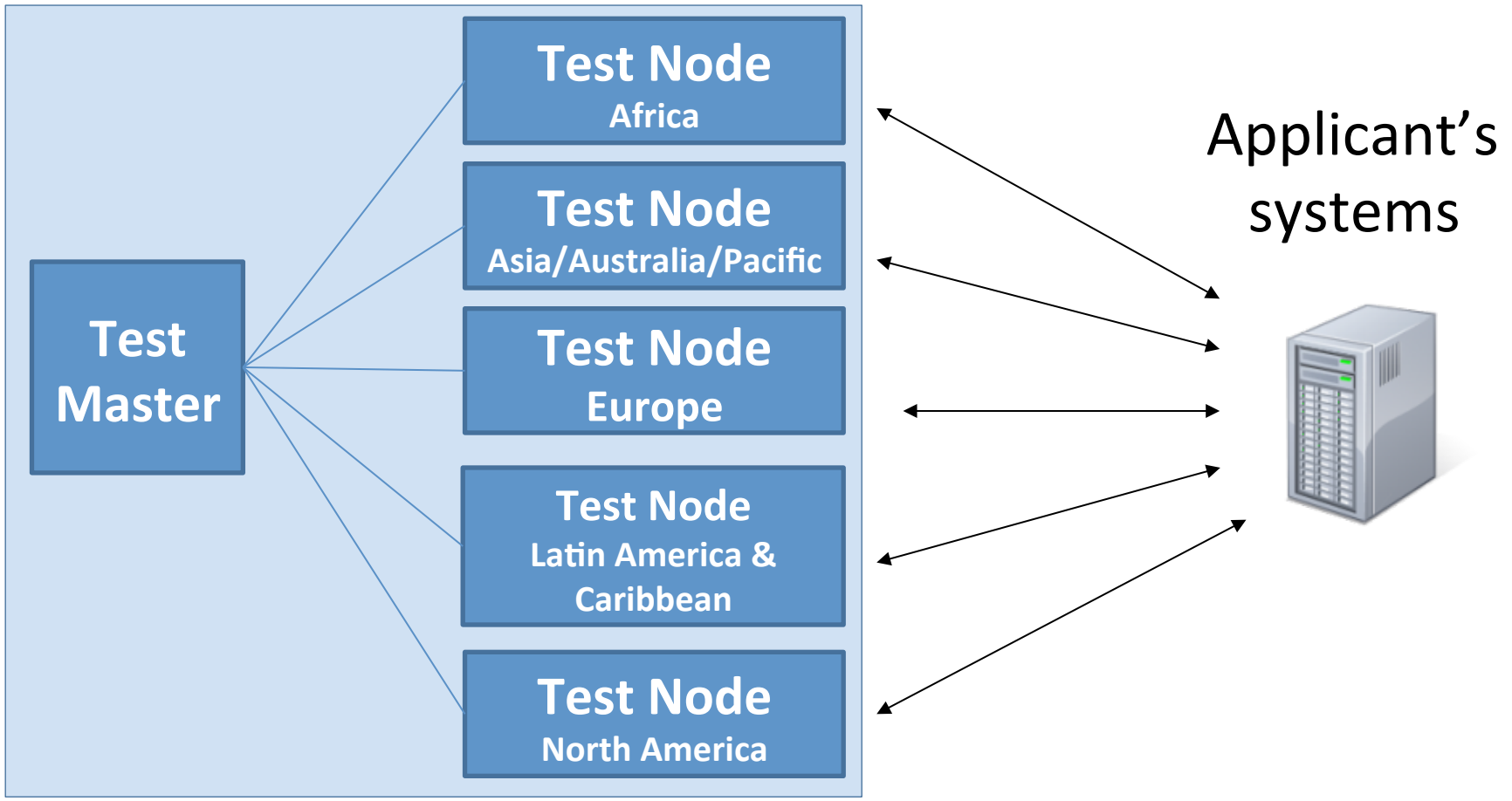
Overview
What is Pre-Delegation Testing (PDT)?

- Verification step to ensure registry ready for production
  - Verifies documentation
  - Tests the production registry systems

PDT Elements

- DNS
- WHOIS
- EPP
- Data Escrow
- IDN

Overview
The PDT System



Applicant's system will tested from all nodes

Overview
PDT Process

- Preparation Activities
  - Set up a test appointment with ICANN
  - Identify a PDT Contact with ICANN
  - Submit PDT Input Data to PDT System
- Testing
  - Expected to be complete in 2 Weeks
  - May require 1 week extension to remedy errors
- Results Communicated by ICANN

Overview
Follow Up Questions

- All questions will be sent through the PDT system messaging tool
- Input data questions
  - Issued at the end of the first week
- Connectivity & minor protocol questions
  - Must be resolved during the test window

How to pass Pre-Delegation Testing

Jakob Schlyter & Fredrik Ljunggren
Kirei

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What is Production-Ready?

- The very same systems that will be used for production will be tested.
- PDT is a final quality check before the application can proceed to delegation.
- Test, check and check again before submitting your data to avoid unnecessary delays.

What data is required for PDT?

+ Parameters for DNS, EPP & Whois
+ IDN tables
+ Self-certification documentation
+ DNSSEC Practice Statement (DPS)
+ Data escrow agreement
+ Sample data escrow deposit

In what format is data submitted?

- DNS/EPP/Whois parameters as XML
  - XML schemas provided
- Machine parsable IDN tables as TXT
  - RFC 4290/3743 preferred
- All other documentation as PDF/A

DNS – Name Servers

- Make sure all name servers responds correctly:
  - IPv4 and IPv6
  - UDP and TCP
  - dnscheck.iis.se may be useful to check delegation and name server configuration
- Check the IANA technical requirements for authoritative name servers.

DNS – Anycast Name Servers

- As stated in the AGB, all anycast nodes (locations) must be declared and will be tested.
  - Although direct instance queries are preferred, query via proxy is allowed.
  - Performance (latency/query rate) will not be tested against individual anycast nodes.
- Listed locations will be cross-referenced with the application.

Whois – Reachability

- Verify that whois.nic.TLD responds:
  - Whois (port 43)
  - HTTP (port 80 and optional port 443)
  - Both IPv4 and IPv6
- nic.TLD must be delegated
  - AGB 2.2.3.3 TLD Zone Contents

Whois – Services

- Check New gTLD Agreement SPECIFICATION 4 for data format
  - Use standard key words and formats
  - Don’t forget the legal disclaimer
- Searchable Whois will be tested if asserted in the original application.

EPP

- Verify that the PDT Service Provider is allowed to connect to the EPP servers.
- Check that all required extensions are provided.
- If CREATE commands requires manual confirmation, respond promptly during the weeks of testing.
  - Whitelisting may be applicable

IDN

- Include the IDN tables provided in the application question 44
  - Machine parsable IDN tables as TXT
- Verify IDN tables before submission
  - github.com/dotse/idn-properties may be used to verify tables

Self-Certification Documentation

- Please use the provided templates to ensure that the documentation is complete.
  - Examples are provided in the templates
- Performance should be measured against the systems used in production.

DNSSEC Practice Statement (DPS)

- DPS that will be in place for production launch
- Must conform to RFC 6841
- Clearly describe the signing-scheme in use & critical controls for key management
- In section 2.2 (Publication of public keys) please outline the process for publishing the DS record(s) in the root zone

Data Escrow Deposit

- One full deposit in XML or CSV format
  - All files signed by registry & encrypted to the PDT Service Provider
  - Data escrow profile not needed as it can be derived from the actual deposit
  - Check the AGB for specific requirements!

Data Escrow Release

- Data Escrow Agreement
  - Ensure your Data Escrow Agent is able to release the deposit as part of PDT

Lessons learned from the PDT Pilot

Mats Dufberg
.SE (The Internet Infrastructure Foundation) – PDT Service Provider

Lessons Learned from the PDT Pilot

- We want to thank the applicants and backend providers that participated in the PDT Pilot!
- We have gained valuable experience and feedback.
- The pilot confirmed that the PDT System works but there are areas for improvement.

Lessons Learned from the PDT Pilot

+ **Better instructions**
  Improved clarity & detail

+ **Improved templates**
  More explanations within the templates

+ **More examples**
  Increased variations of data

+ **New HOWTOs**
  How to perform self-tests prior to PDT

+ **Extended Customer Support Hours**
  To provide coverage to more time zones

Lessons Learned from the PDT Pilot

What You can do

+ Ensure that the PDT system gets all of the required credentials
+ Ensure your systems and firewalls are open for the PDT Test Nodes
+ Check that your EPP system is fully EPP compliant
+ Keep headers in document templates
+ Review the FAQ when preparing your data

Questions?

PDT Tutorial

Mats Dufberg
.SE (The Internet Infrastructure Foundation) – PDT Service Provider

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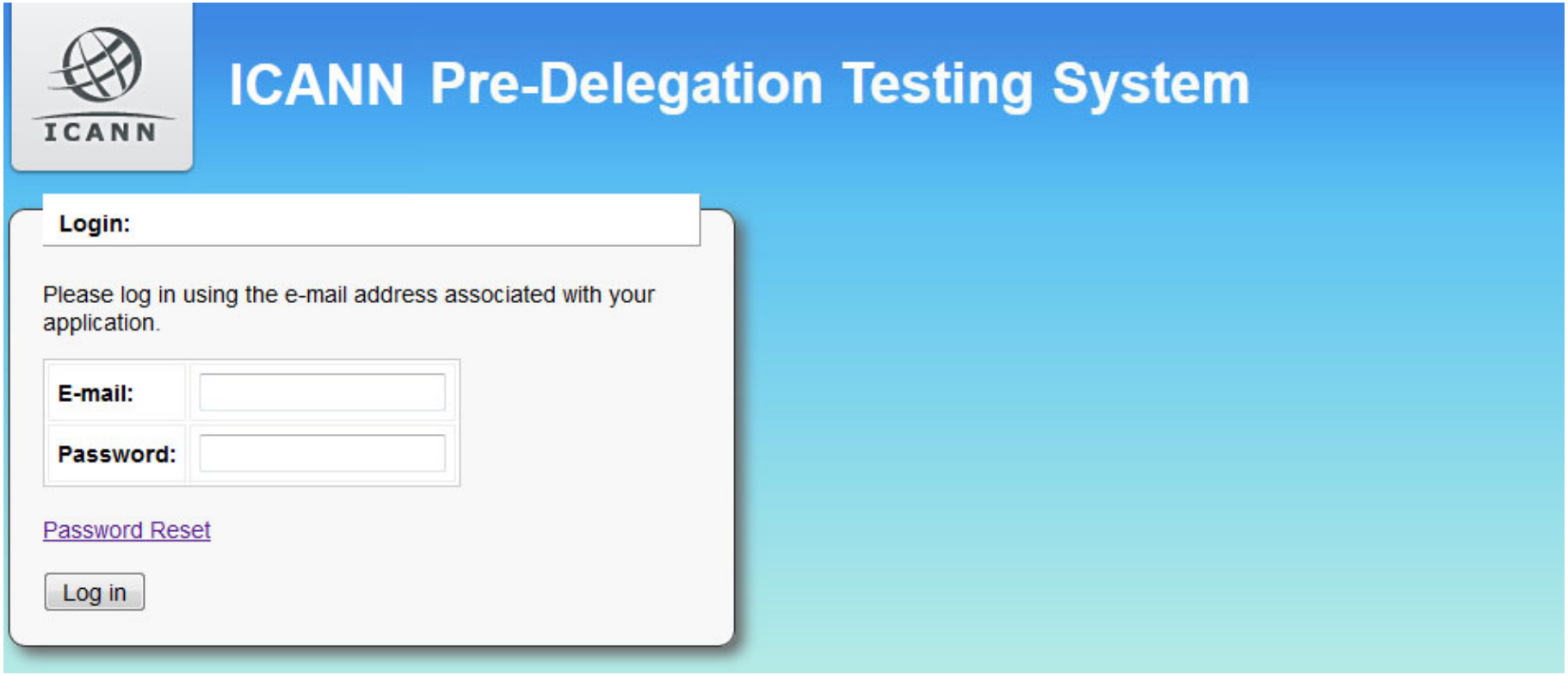
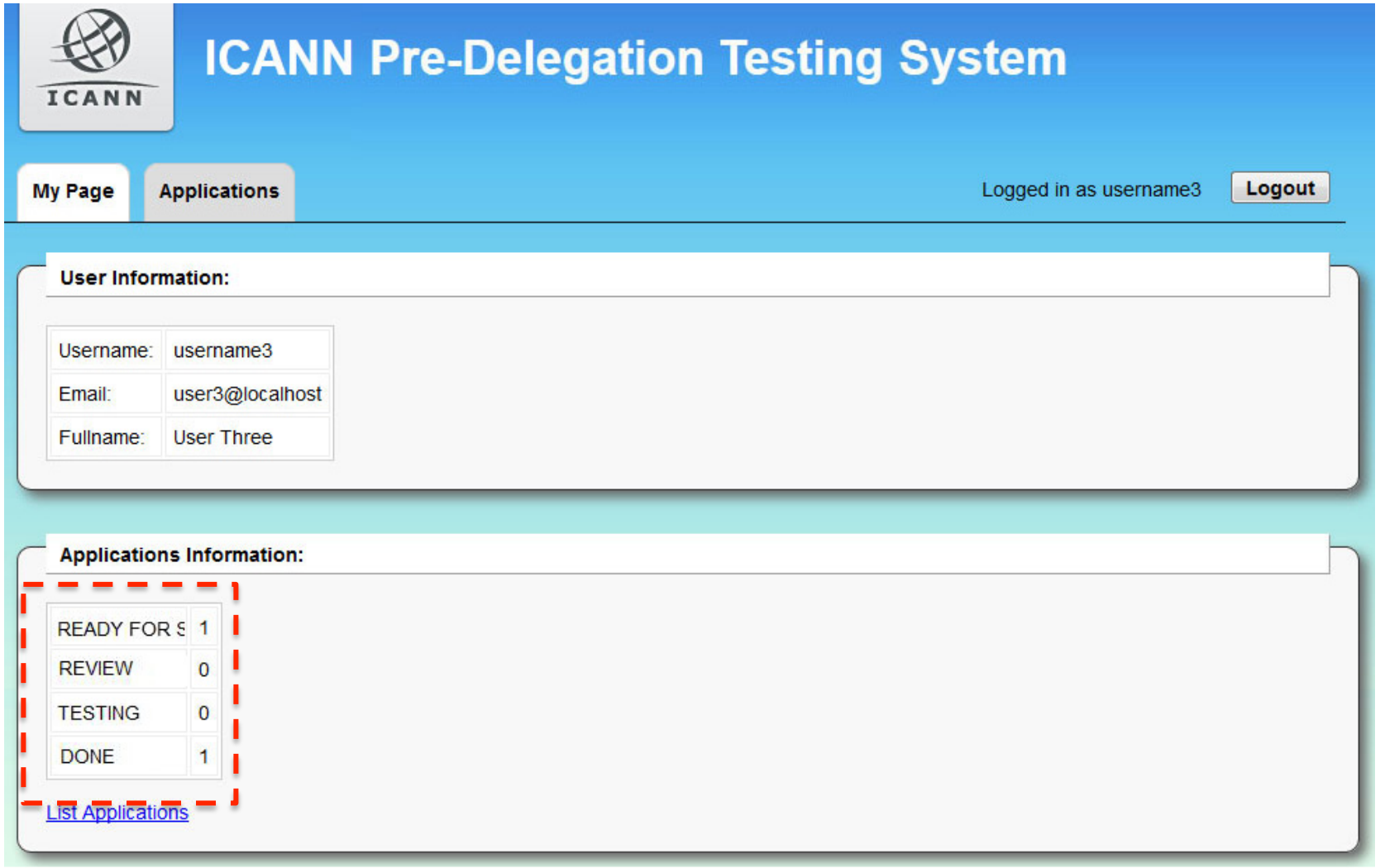
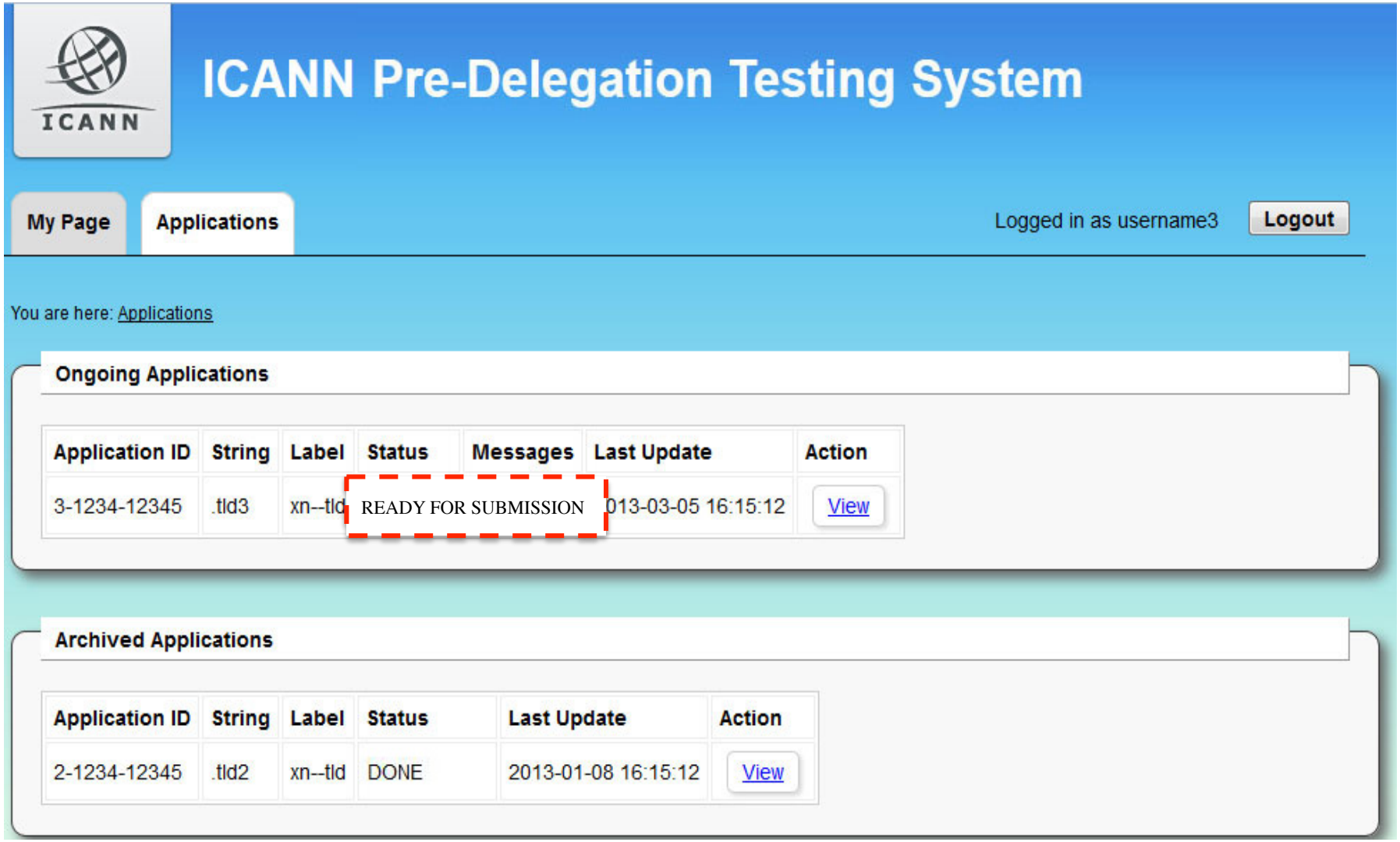
Login to PDT System



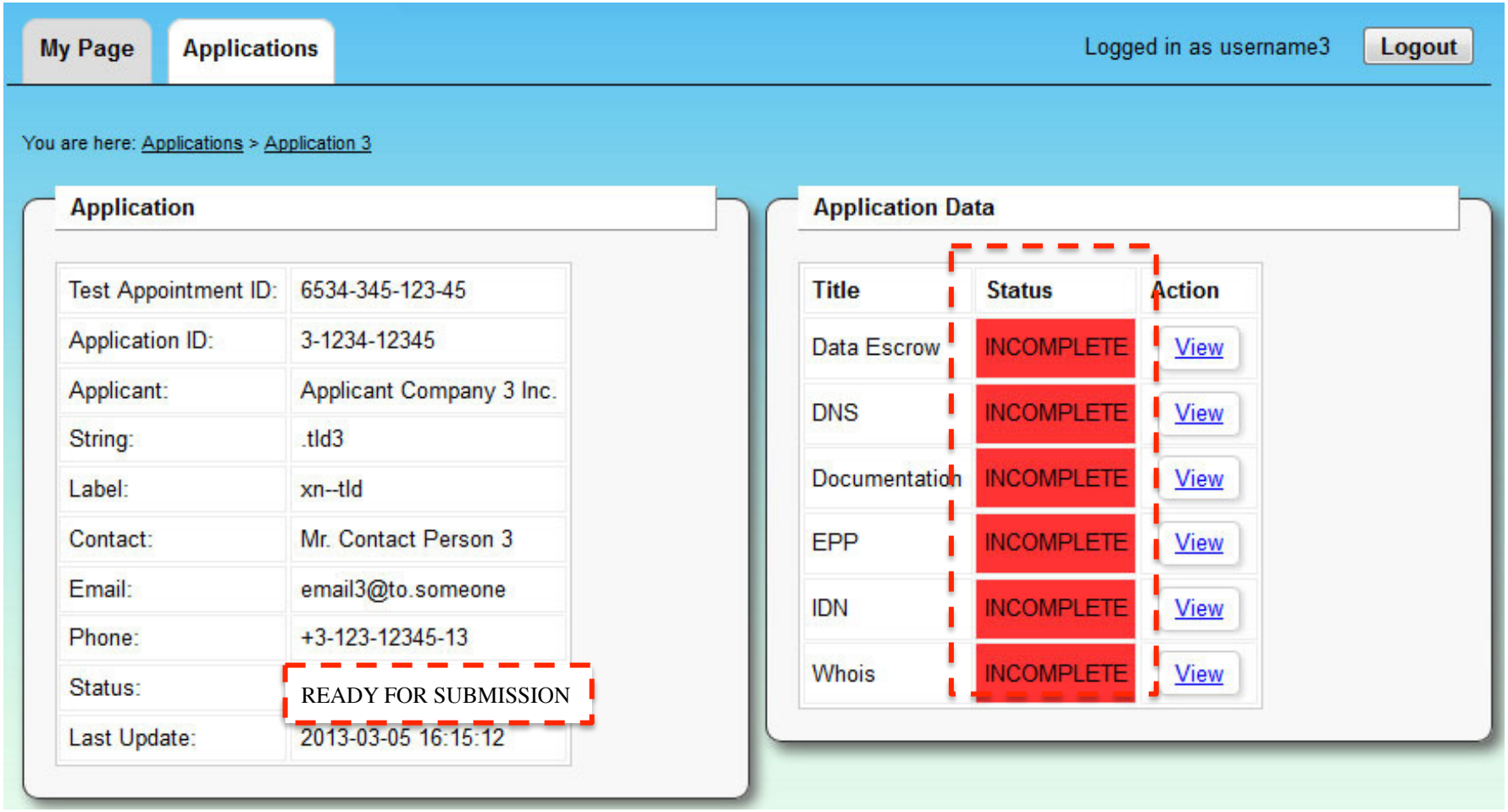
User's view in PTD System



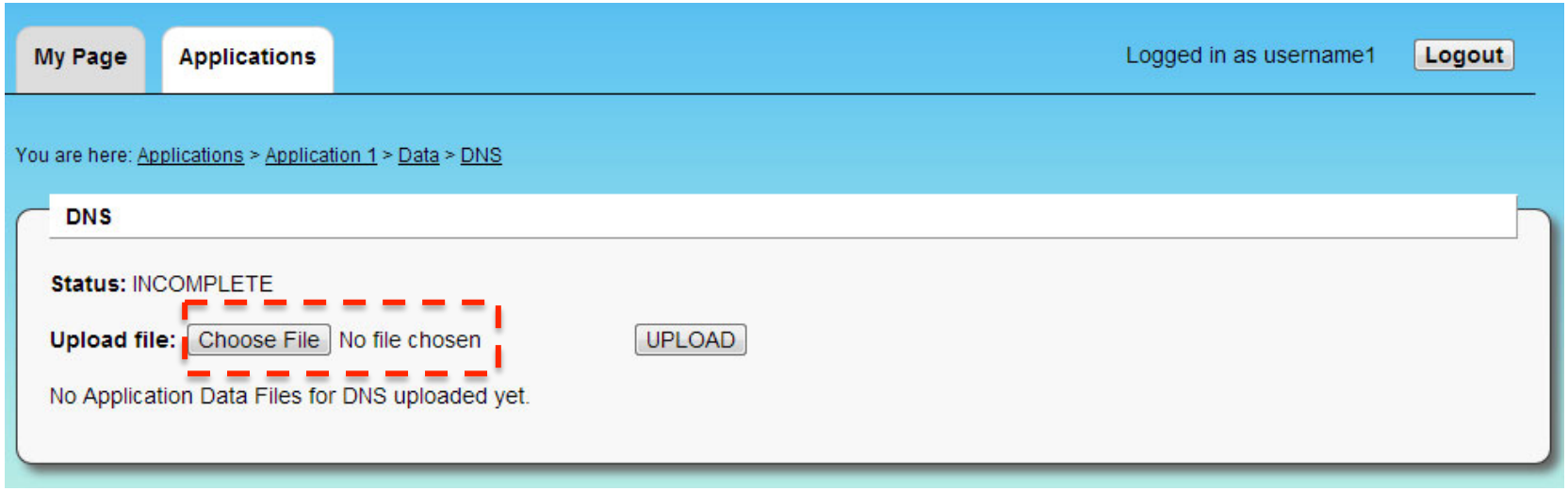
Applications (gTLD's)



Application (gTLD) Status Page



File input page (DNS)



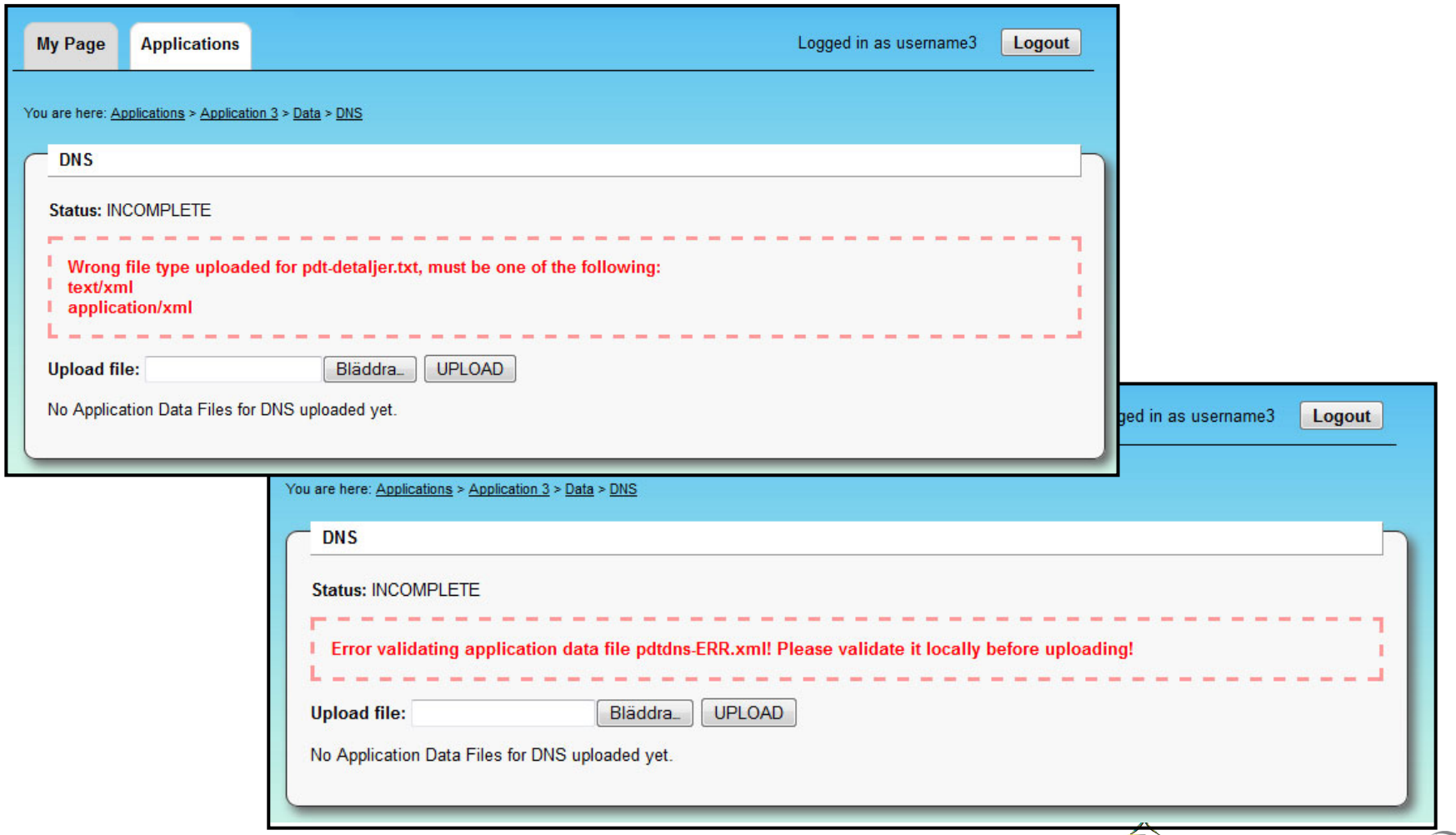
All information shall be supplied in an XML file formatted according to the schema mentioned below. The schema can be downloaded in several formats, and for your convenience a template XML file is provided that you can download and fill out with your own data.

Your XML file will be validated against the schema after uploading and you will be notified immediately if there are any errors. However, for better error reporting you are encouraged to validate your XML yourself before uploading.

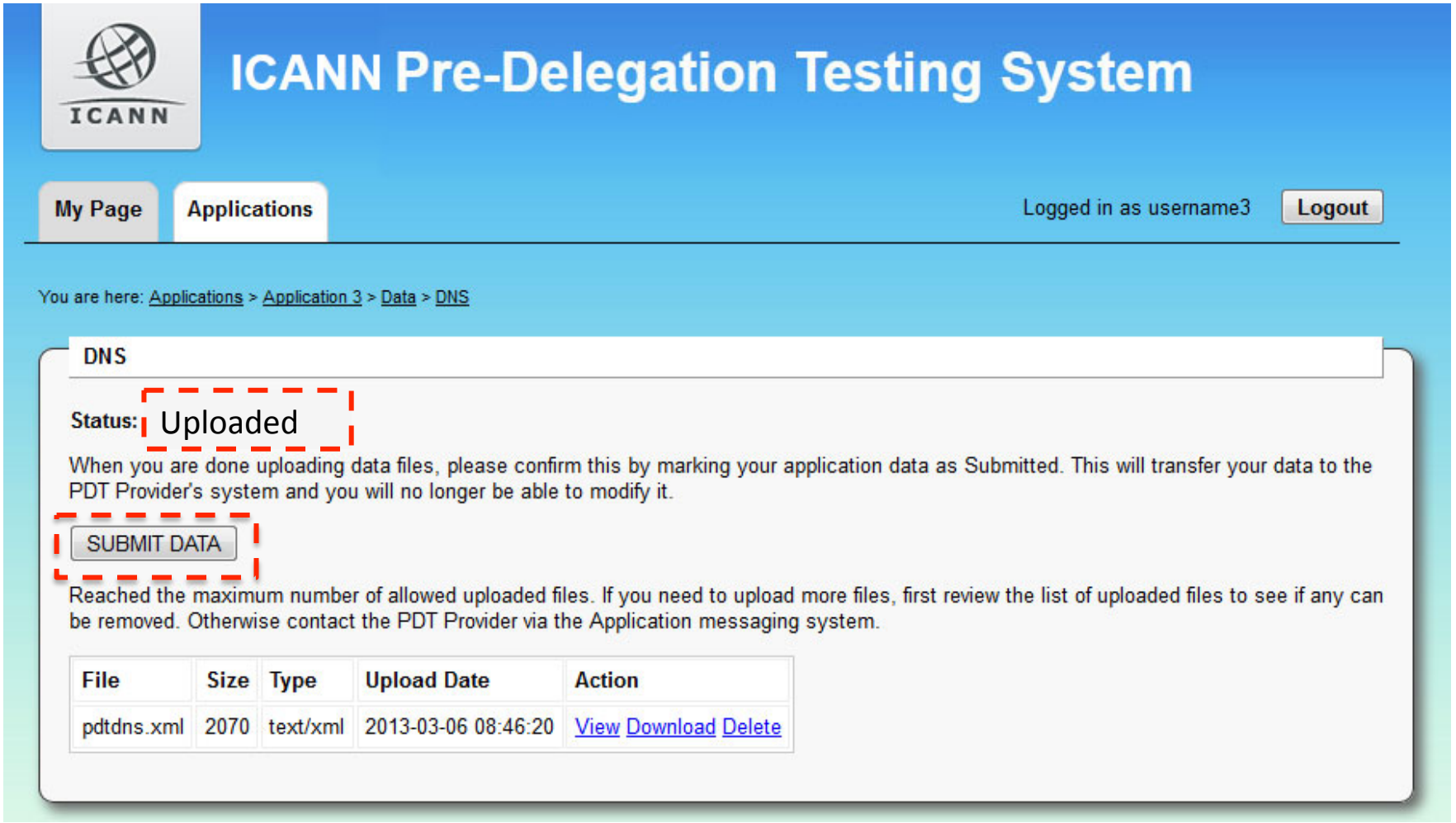
DNS RELAX NG Schema
DNS RELAX NG Compact Schema
DNS XML Schema Definition
DNS Example XML

Check of uploaded file

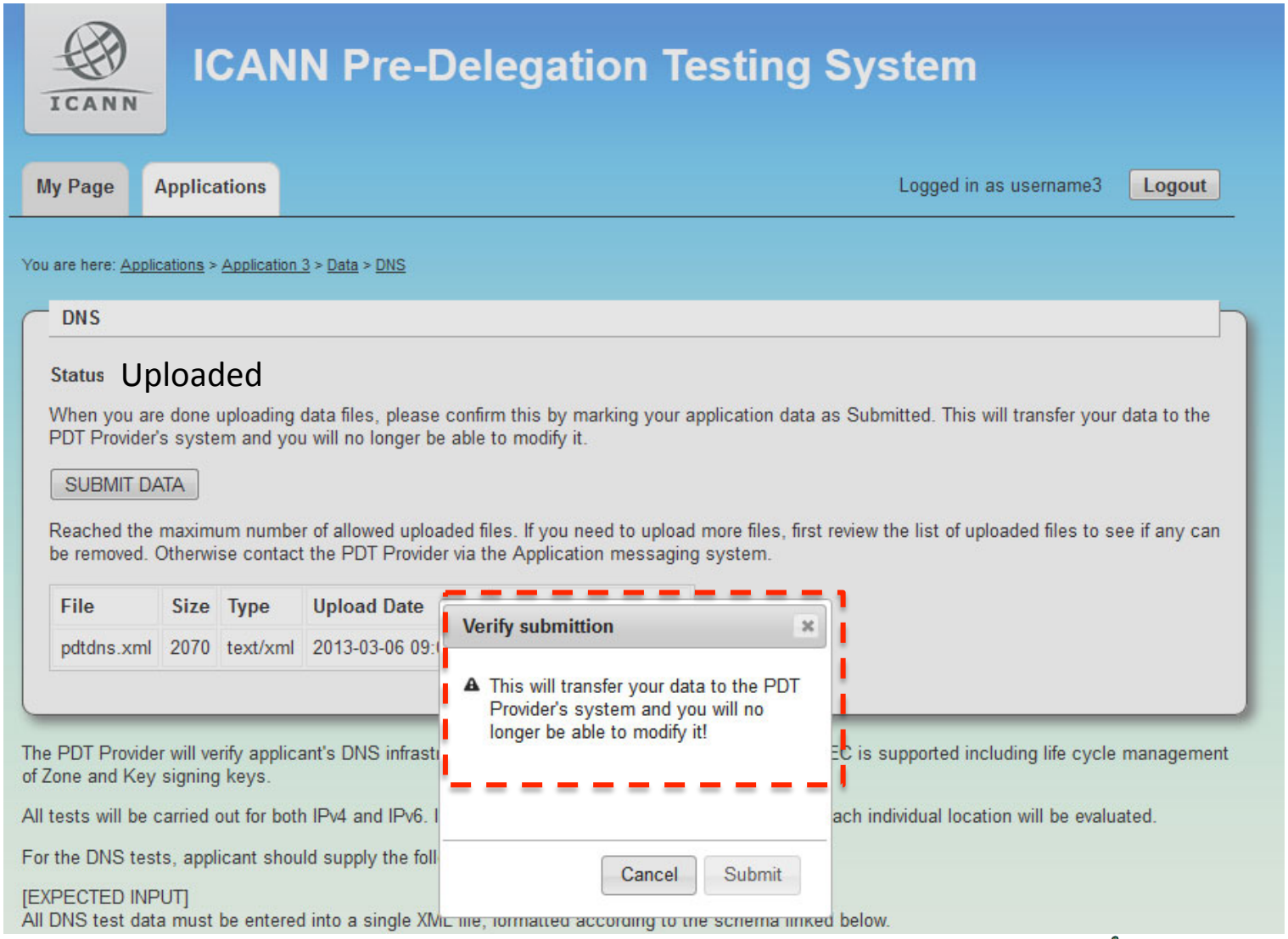
+ At upload, a basic file scan is performed



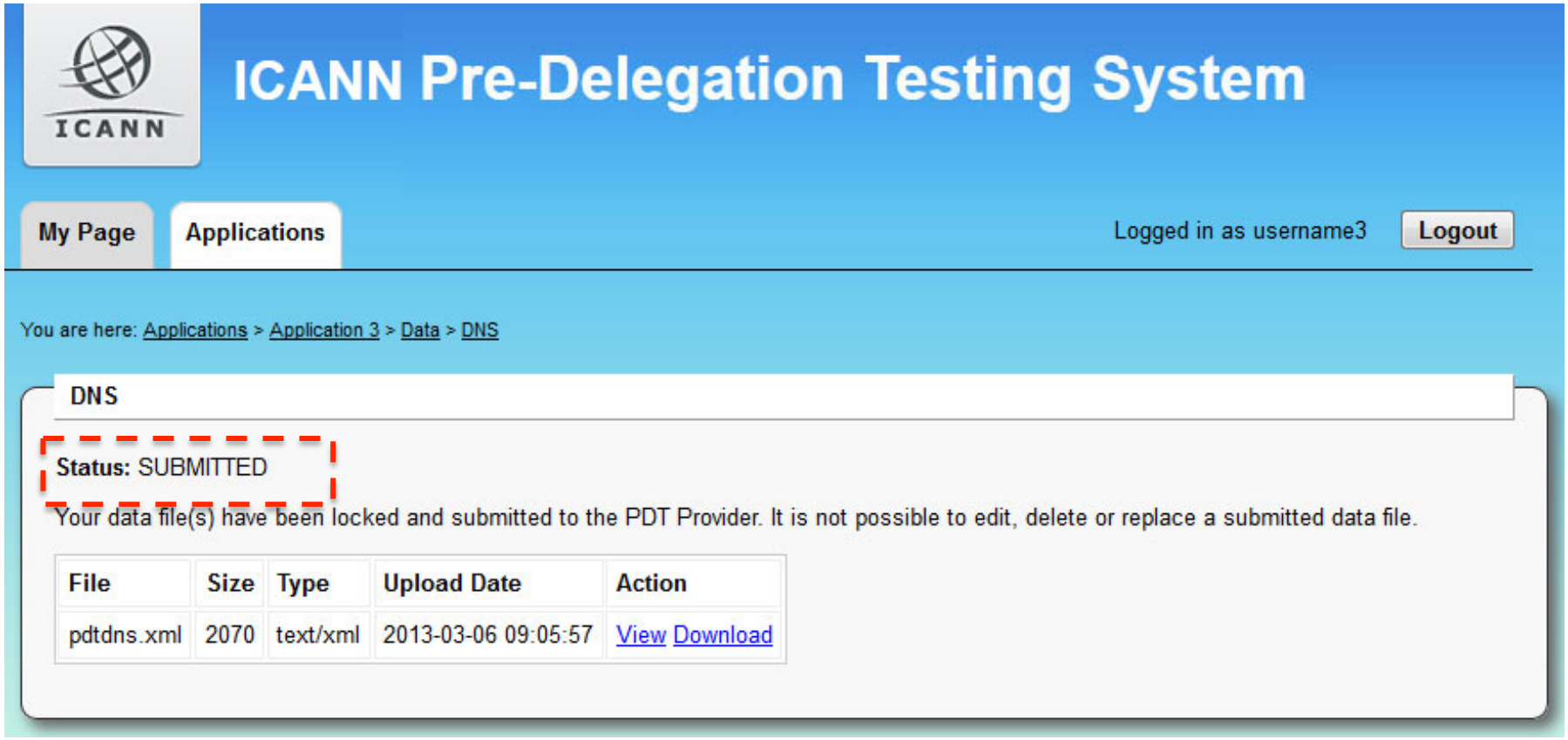
Uploaded files to be submitted



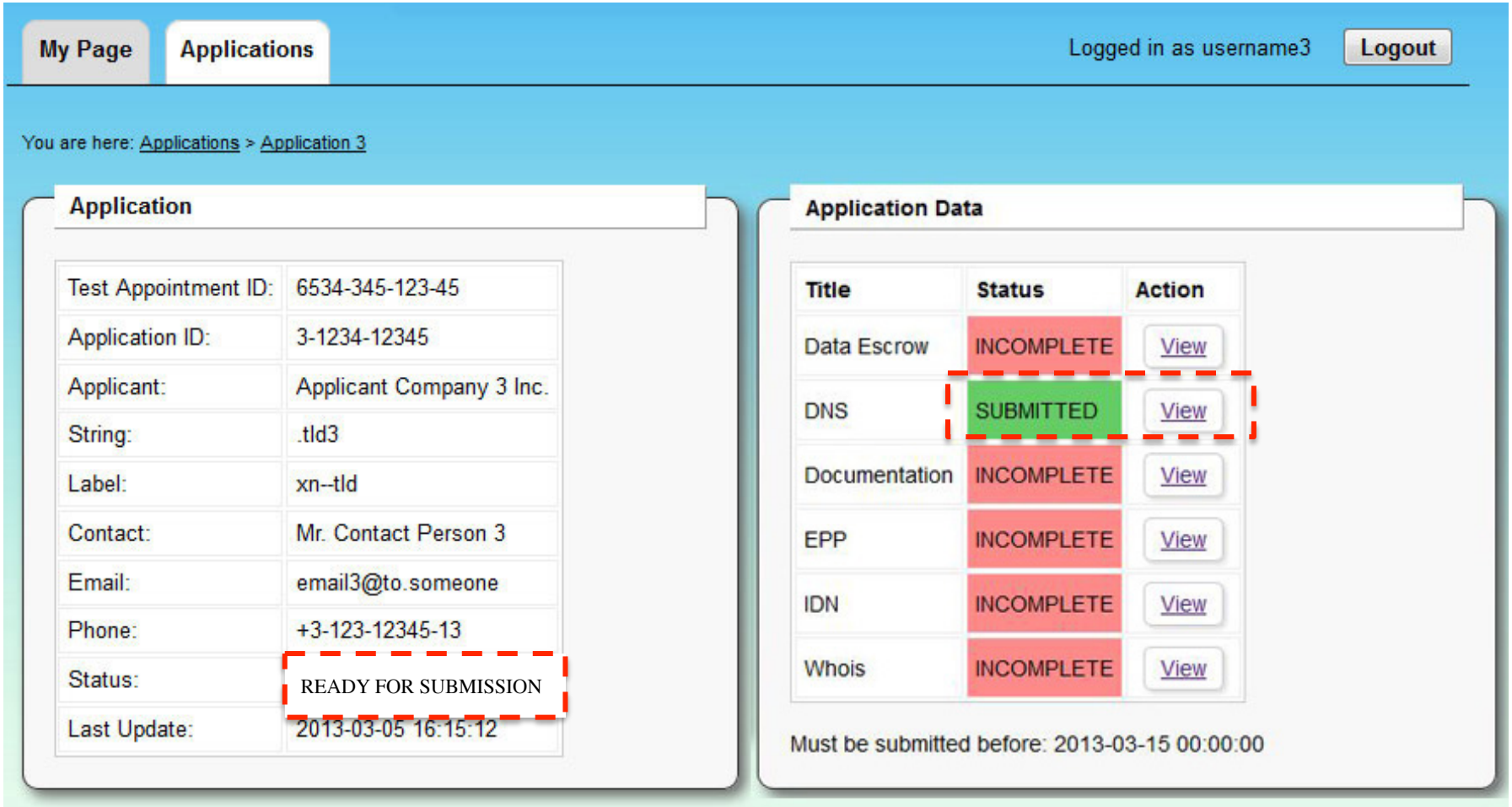
Submitting uploaded files



File or files are submitted



PDT Status Page



Status during review and testing

Application

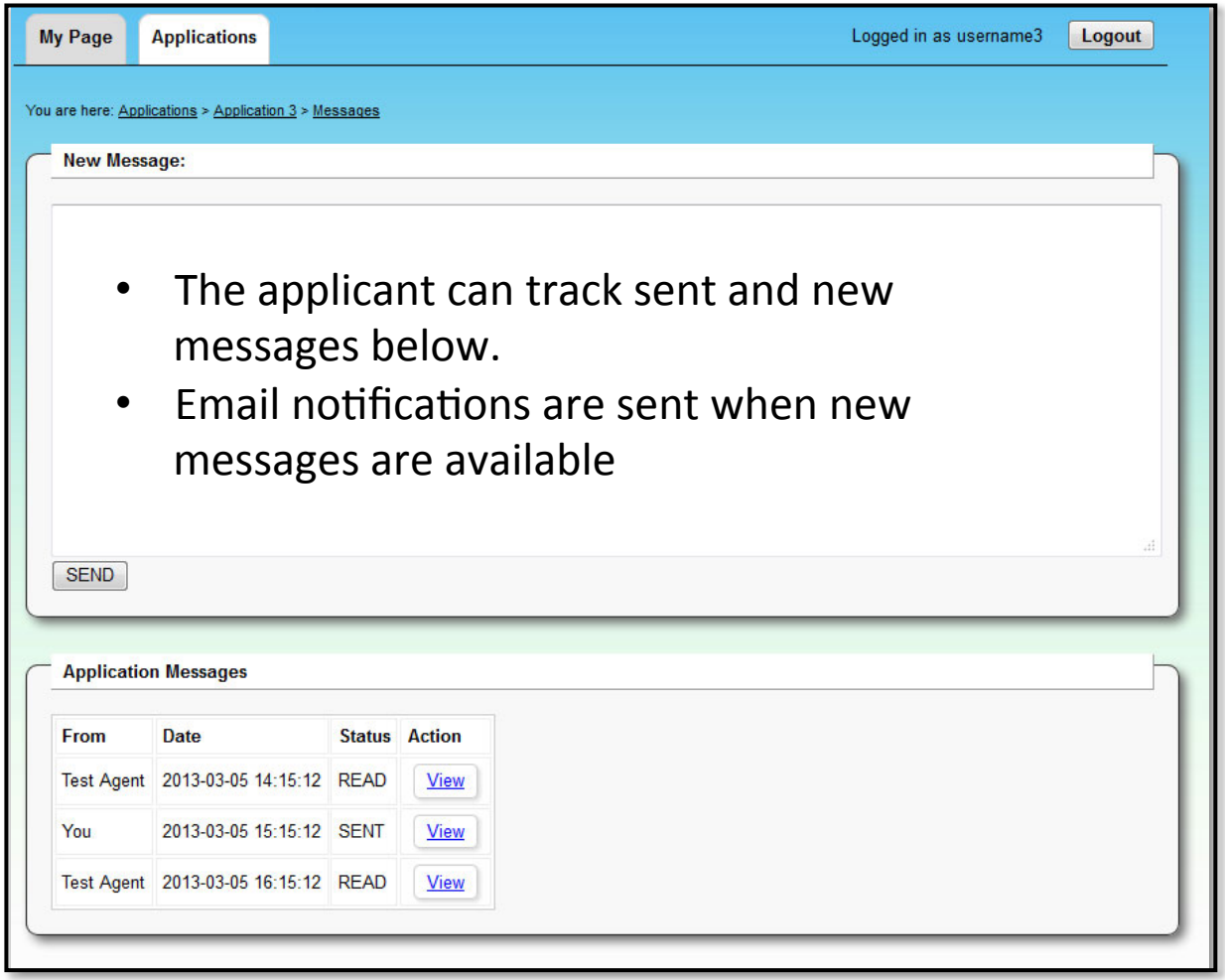
Test Appointment ID:	5534-345-123-45
Application ID:	2-1234-12345
Applicant:	Applicant Company 2 Inc.
String:	.tld2
Label:	xn--tld
Contact:	Mr. Contact Person 2
Email:	email2@to.someone
Phone:	+2-123-12345-13
Status:	REVIEW
Last Update:	2013-01-08 16:15:12

Application

Test Appointment ID:	5534-345-123-45
Application ID:	2-1234-12345
Applicant:	Applicant Company 2 Inc.
String:	.tld2
Label:	xn--tld
Contact:	Mr. Contact Person 2
Email:	email2@to.someone
Phone:	+2-123-12345-13
Status:	TESTING
Last Update:	2013-01-08 16:15:12

Communication

+ Use the messaging tool in the PDT System for all communication



- The applicant can track sent and new messages below.
- Email notifications are sent when new messages are available

Preparation Resources Available

Russ Weinstein
ICANN

Resources Available on the micro-site

http://newgtlds.icann.org/en/applicants/pdt

- Test Specifications
- Instructions for Data Preparation
  - Templates & Examples
- Frequently Asked Questions (new)
- Query by Proxy Approach for PDT (new)

Questions?