CROMERR Made Easier

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Supporting the Business of Environmental Protection

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Philadelphia, Pennsylvania

http://www.exchangenetwork.net/en2015
ABSTRACT

Shared CROMERR Services (SCS) is a group of web services aimed at making the implementation of CROMERR easier. EPA is working to address some of the pain points that early adopters have faced.
CROMERR Made Easier

- What is SCS?
- What does SCS look like?
- How does SCS make CROMERR easier?
- Lessons Learned
- Issues that still need to be worked out
What is SCS?

• Shared CROMERR Services

• Group of web services

• Covers 4 things:
  – Registration and Account Management
  – Identity Proofing
  – Signature Device
  – Signature Ceremony and Copy of Record
Shared CROMERR History

- 09/27/2012 - Shared CROMERR Charter (18 States)
- 10/18/2012 - Component Guidance and Recommendations
- 11/15/2012 - Exchange Network/Grant Applicant Outreach (e.g. vote)
- 03/14/2013 - Application Status and Outreach Results
- 03/30/2013 - Prototype SCS services and offer SCS Toolkit

Exchange Network Shared CROMERR Services Website
http://www.exchangetnetwork.net/shared-cromerr-services-ipt/
Shared CROMERR Toolkit

Services & Documentation

Getting Started with Shared CROMERR:

• **Kickoff Meeting**
• **Identify Shared CROMERR Component Goals**
• **CROMERR Toolkit**
  - Access Authority
  - Baseline CROMERR Checklist & Attachments
  - Contractual and Project Planning Package
  - Development Toolkit
  - Example Shared CROMERR Demo Application

http://www.exchangenetwork.net/shared-cromerr-services-ipt/

Shared CROMERR Demo Application

https://dev.epacdx.net/SharedCromerrServicesDemo
CROMERR Made Easier

• What is SCS?
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• How does SCS make CROMERR easier?
• Lessons Learned
• Issues that still need to be worked out
What does SCS look like?
```csharp
AEERS.SCS.UserManagementService.RegisterType(scsUser = SCSUserManagement.RetrieveUser(UserNameLabel1.Text);
    AEERS.SCS.SignatureAndConsentService.UserType sigsUser = new AEERS.SCS.SignatureAndConsentService.UserType()
    
    var tempSCSArray = ((AEERS.SCS.SignatureAndConsentService.ConsentActivityType)Session["tempSCSDocuments"]).Documents.TofRow();
    int index = Array.FindIndex(tempSCSArray, row => row.ID == BLIActivityID.GetActivityID("Report", ((AEERS.SCS.DAL.Submission))).ID);
    reportbl.Text = tempSCSArray[index].Name;
    reportdocbl.Text = tempSCSArray[index].ID;
    reportSigValidatebl.Text = (SCSSigCor.Validate Sig(sigsUser, tempSCSArray[index]) ? "Valid" : "Not Valid");
    index = Index % 2 == 0 ? index + 1 : index - 1;
    reportbl.Text = tempSCSArray[index].Name;
    reportdocbl.Text = tempSCSArray[index].ID;
    index = Array.FindIndex(tempSCSArray, row => row.ID == BLIActivityID.GetActivityID("Documentation", ((AEERS.SCS.DAL.Submission))).ID);
    documentationbl.Text = tempSCSArray[index].Name;
    documentationdocbl.Text = tempSCSArray[index].ID;
    documentationSigValidatebl.Text = (SCSSigCor.ValidateSig(sigsUser, tempSCSArray[index]) ? "Valid" : "Not Valid");
    index = Index % 2 == 0 ? index + 1 : index - 1;
    documentationbl.Text = tempSCSArray[index].Name;
    documentationdocbl.Text = tempSCSArray[index].ID;
    List<int> subIdList = new List<int> {3};
    subIdList.Add(((AEERS.SCS.DAL.Submission).ItemDataItem).submissions_id);
    submissionStatusText = BLISubmission.GetSubmissions(subIdList).First().SubmissionStatus.submission_status;
```
What does SCS look like?
Establish Proof of Identity

As a Responsible Official, you are required to establish proof of identity using LexisNexis Services prior to signing/submitting electronic reports through AEERS. Please verify the information below is correct before proceeding.

User ID: EX120@MAILINATOR.COM
First Name: Katharine
Middle Initial: Sisk
Last Name: 

☐ I have reviewed the name presented above and I would like to proceed with LexisNexis identity proofing.

[Proceed] [Cancel] or click here for paper-based option
Please click "OK" to perform identity verification conducted by LexisNexis®.

Canceling this process may require additional information to be provided in order to supply sufficient proof of identity under Title 40 CFR § 3.2000(b)(5)(vii).

OK  Cancel

LexisNexis® Privacy Policy
# Submission Receipt

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<th>Howard Woowitz</th>
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<tr>
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**ABC Plant**

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<td>detached_signature.xml</td>
</tr>
<tr>
<td>Signature Validation</td>
<td>Valid</td>
</tr>
</tbody>
</table>

**Submission Status**: Submitted
What does SCS look like?

Whatever you want it to look like!
CROMERR Made Easier

• What is SCS?

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• How does SCS make CROMERR easier?

• Lessons Learned

• Issues that still need to be worked out
How does SCS make CROMERR easier?

• Lots of code that you don’t have to write

• Much easier CROMERR checklist

• Details of storage, backups, retention, etc. handled for you

• One account can span multiple applications by default
CROMERR Made Easier

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Lessons Learned

• From a programmer perspective, SCS is fairly straight-forward.

• Submit your CROMERR application before you think you should.

• Username collisions

• Test often and in every environment.
CROMERR Made Easier

• What is SCS?
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Issues that still need to be worked out

• LexisNexis via popup often fails
• Documentation needs to be updated and in some cases created
Partners Build System Tools
Using Existing Standard CROMERR Services

*https://encromerrdev.epacdnnode.net/shared-cromerr-ws/services/
Partner System Tools Comprised of CROMERR System Functions Necessary For CROMERR Checklist Compliance

• **Registration Tool**
  – Account Registration and Profile Management
  – Electronic & Paper Identity Proofing
  – Signature Device Registration
  – Electronic Signature Agreement (ESA) / Signature Ceremony
  – Organization / Organization Types / Role Affiliation bound to ESA

• **Help Desk Tool**
  – Account Management/Administration
  – Signature Device Management
  – Application / Role Based Access Management
  – Record Repudiation Administration Tool
  – Electronic Signature Agreement Management
  – Organization / Facility Management

• **Record Receiving System**
  – Out-of-Band Receipt and Incident Messaging
  – Human Readable Copy of Record Transaction History
Each State/Tribe or Local Government Partner may have multiple Systems

Each System may involve building duplicate functions to delegate to separate organizations, Information Owners, Contractors, and/or Industry.

Original Services Conclusions:
- A lot of System Functions must be built
- A lot of potentially non-standard system functions for enforcement
- A lot of CROMERR Checklist Review Time
New Pilot Services
for Compliance Monitoring Data Portal

**New** Shared CROMERR System Functions

**CMD Portal**
What is New?

• Enhanced Web Menu-based Shared CROMERR Services
  – Shared CROMERR Registration Tool
  – Shared CROMERR Partner Help Desk Tool
  – Shared CROMERR Dataflow Help Desk Tool
  – Shared CROMERR Company Administration Tool

• New Web Services
  – Single (or Reduced) Sign On Authentication/Authorization Services
  – Organization Management Web Services

• Custom Partner/Dataflow Provisioning
  – Customize Privacy Notices by Provider/Partner/Program/Role
  – Administrative tools to Delegate Role/Functions by Partner, and/or Role
  – Custom Home Pages and Help Services by Partner
  – Customize Electronic Signature Agreements (ESA’s) & Attestations
  – Customize Identity Proofing and Metadata Collection Requirements
  – Customize Users Control over ability to Revise/Manage their own Profiles

Completely Optional and Integrate with Existing Services
Mock Demo

Shared CROMERR Registration
• Master Home Page
• Local Home Page
Register

- **By Partner**
- **By Program**
- **By Program & Role**
- **Local Home Bypass w/ parameters**
Register

- By Partner
- By Program
- By Program & Role
- Local Home Bypass w/ parameters
Register

- By Partner
- By Program
- By Program & Role
- Local Home Bypass w/ parameters
- Local Home Page Skips Here
• Account Profile
• Organizations
• Email Verification
• Identity Proofing
• Signature Agreements
Many more features

• Id Proofing by Partner, Dataflow, Role
• Organization Web Services allow Partners to own and manage their Organization tables (or share)
• Both Roles and Organizations Optionally Managed by Type so only certain roles see certain Organizations or certain organizations for a specific partner.
Summary

• New Services and Functions
• Standard Web Services AND Standard Functions
• Reduced CROMERR Checklist Review
References and Documentation:

SCS Documentation: [http://www.exchangenetwork.net/shared-cromerr-services-ipt/](http://www.exchangenetwork.net/shared-cromerr-services-ipt/)

SCS Demo Tool: [https://dev.epacdx.net/SharedCromerrServicesDemo](https://dev.epacdx.net/SharedCromerrServicesDemo)

MILESTONES
SCS State Registration:

SCS Owner Administration

SCS Organization Administration (e.g. Sponsorship) In Development Oct. 1, 2015 Production Goal Jan. 2016

SCS Reduced Sign On
Shared CROMERR Appendix
Flexible Registration

* Implemented

** Ability to Customize Registration, Skip (or hide) menus
SCS Updates and Improvements

• Over 19 States have tested or are now using Shared CROMERR Services
• Two systems are managed in Production
• Major New Services are becoming available that drastically reduce effort
• Compliance Monitoring Data (CMD) Portal Pilot
Flexible Registration

Skip (or hide) menus (context variables)

Design Path to support additional shared services as they are constructed and integrated into Shared CROMERR Registration