



U.S. Fish & Wildlife Service

Natural Resource Program Center

National Wildlife Refuge System

Faster than the speed of light: Creating records through the backdoor of ServCat



June 2014

Presented by: Sarah Shultz
Natural Resource Program Center
Fort Collins, CO

Natural Resource Program Center





What is ServCat?

The Service Catalog is an online application designed to centralize and preserve information about the U.S. Fish and Wildlife Service.



ServCat is awesome
just like this
astronaut cat!

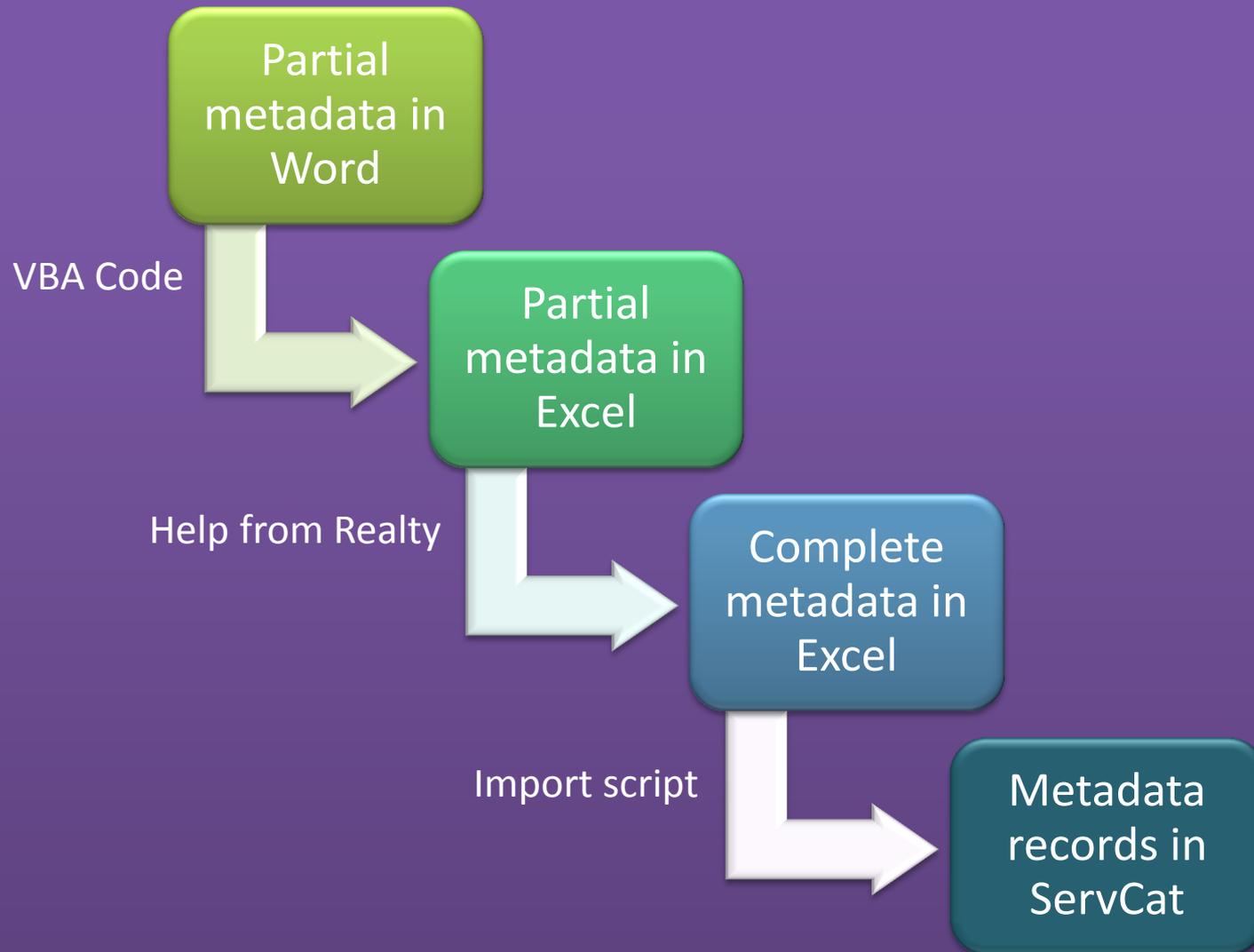


Land Status Maps Import Overview

- Realty is scanning thousands of USFWS Land Status Maps
- Partial metadata already available for some maps
- Imported 500 maps into ServCat through the back-end of the database



Batch Import Workflow



Metadata in Word

Pre-1990 Status Maps for Archive

Example:

Region

State

Name of refuge/hatchery/waterfowl production area – map date

Region 1

Idaho

National Wildlife Refuges

Grays Lake – October, 1972

Grays Lake – February, 1976

Gray's Lake – February, 1989

Kootenai – July, 1986

Kootenai – November, 1984

Minidoka (Index) - date unknown

Minidoka (3) – January, 1976

Waterfowl Production Areas

Oxford Slough - April, 1986

Oxford Slough – July, 1987

Oregon

National Wildlife Refuges

Cold Springs – July, 1980

Cold Springs – July, 1980 (copy)

Columbian White-Tailed Deer – April, 1975

Columbian White-Tailed Deer – April, 1975 (copy)

Hart Mountain National Antelope Refuge (Index) –
December, 1971

Yay, we have
metadata!



VBA Code

```
'#####'  
'$ Pull out the refuge name $'  
'#####'  
  
Private Sub btnRefName_Click()  
Dim strType As String  
For x = 3 To 242  
    If Sheet1.Cells(x, 3).Value <> "" Then  
        strType = Left(Sheet1.Cells(x, 3).Value, Len(Sheet1.Cells(x, 3).Value) - 1)  
        If strType = "Hatcherie" Then  
            strType = "Hatchery"  
        Else: End If  
    Else: End If  
  
    Dim strContent As String, intDash As Integer, intParenthesis As Integer  
    strContent = Sheet1.Cells(x, 4).Value  
    If strContent <> "" Then  
        intDash = InStr(strContent, "-")  
        intParenthesis = InStr(strContent, "(")  
  
        If intParenthesis = 0 And intDash <> 0 Then  
            strContent = Left(strContent, intDash - 1)  
        Else:  
            If intParenthesis <> 0 And intDash < intParenthesis Then  
                strContent = Left(strContent, intDash - 1)  
            Else:  
                If intDash = 0 And intParenthesis <> 0 Then  
                    strContent = Left(strContent, intParenthesis - 1)  
                Else:  
                    If intDash <> 0 And intParenthesis < intDash Then  
                        strContent = Left(strContent, intParenthesis - 1)  
                    Else: End If  
                End If  
            End If  
        End If  
  
        If Right(strContent, 1) = " " Or Right(strContent, 1) = "-" Then  
            strContent = Left(strContent, Len(strContent) - 1)  
        Else: End If  
  
        Sheet1.Cells(x, 5).Value = strContent & " " & strType  
    Else: End If  
Next x  
End Sub
```

Metadata in Excel

Metadata from Word Document	Title of Map	State	Region	FBMS Code	Brief Description
	Title				
Abernathy Salmon Technology Center - November, 1988	Abernathy Salmon Technology Center	Washington	1	FF01FABR00	This map depicts land ownership within Abernathy Salmon Technology Center.
Eagle Creek - September, 1965	Eagle Creek National Fish Hatchery	Oregon	1	FF01FEGC00	This map depicts land ownership within Eagle Creek National Fish Hatchery.
Entiat - November, 1986	Entiat National Fish Hatchery	Washington	1	FF01FENT00	This map depicts land ownership within Entiat National Fish Hatchery.
Makah - October, 1976	Makah National Fish Hatchery	Washington	1	FF01FMKH00	This map depicts land ownership within Makah National Fish Hatchery.
Quilcene (1) - March, 1983	Quilcene National Fish Hatchery: 1	Washington	1	FF01FQLC00	This map depicts land ownership within Quilcene National Fish Hatchery.
Quilcene (2) - April, 1988	Quilcene National Fish Hatchery: 2	Washington	1	FF01FQLC00	This map depicts land ownership within Quilcene National Fish Hatchery.
Quinault - August, 1971	Quinault National Fish Hatchery	Washington	1	FF01FQNL00	This map depicts land ownership within Quinault National Fish Hatchery.
Spring Creek (2) - February, 1986	Spring Creek National Fish Hatchery: 2	Washington	1	FF01FSPC00	This map depicts land ownership within Spring Creek National Fish Hatchery.

ServCat Import Script

```
--Merge Individuals
MERGE Contact AS T
USING (SELECT DISTINCT firstname, middlename, lastname FROM Reference_Load.dbo.Contacts WHERE isCorp = 0
) AS S
ON ISNULL(T.firstname, '') = ISNULL(S.firstname, '')
AND ISNULL(T.middlename, '') = ISNULL(S.middlename, '')
AND ISNULL(T.lastname, '') = ISNULL(S.lastname, '')
WHEN NOT MATCHED THEN
INSERT (
firstname, middlename, lastname, isindividual)
VALUES(S.firstname, S.middlename, S.lastname, 1);

--Merge Corporate Names
MERGE Contact AS T
USING (SELECT DISTINCT ISNULL(lastname, '') AS lastname FROM Reference_Load.dbo.Contacts WHERE isCorp = 1
) AS S
ON ISNULL(T.Corporatename, '') = ISNULL(S.lastname, '')
AND T.isindividual = 0
WHEN NOT MATCHED THEN
INSERT (corporatename, isindividual)
VALUES(S.lastname, 0);

--Merge Keywords
MERGE Keyword AS T
USING (SELECT DISTINCT Keyword FROM Reference_Load.dbo.Keywords
WHERE Keyword is not null and LEN(ltrim(rtrim(replace(keyword, CHAR(13), '')))) > 0
and Keyword <> 'STUDY LOCATIONS:' and Keyword <> 'NRBIB: ACAD-'
) as S
ON T.Keyword = S.Keyword
WHEN NOT MATCHED THEN
```

Metadata in ServCat

Engineering Division and U.S. Fish and Wildlife Service. 1993. Erie National Wildlife Refuge (Seneca Division). Hadley, Massachusetts. Erie National Wildlife Refuge Land Status Maps. 5R PA 523. U.S. Fish and Wildlife Service- Division of Realty. Map-25922.

Map

Reference Code: 25922

Reference Status as of 02/12/2014: Active

Visibility: Public

Core Information

Map Series

[View Profile](#)

Map Series Title Erie National Wildlife Refuge Land Status Maps
Map Series Description This map series depicts land ownership within Erie National Wildlife Refuge in Pennsylvania. Compiled from aerial photographs, BLM surveys, and surveys by USFWS.
Publisher U.S. Fish and Wildlife Service- Division of Realty; Engineering Division; U.S. Fish and Wildlife Service

Map

Map Title Erie National Wildlife Refuge (Seneca Division)
Map Brief Description -
Map Date of Issue June 01, 1993
Map Content Begin Date February 01, 1968
Map Content End Date June 01, 1993
Map Version -
Map Issue ID 5R PA 523
Map Full Description This map depicts land ownership within Erie National Wildlife Refuge in Pennsylvania. Compiled from aerial photographs, BLM surveys, and surveys by USFWS.
Map Purpose -
Place Produced Hadley, Massachusetts
Map Notes Map 2 of 3
Author Engineering Division; U.S. Fish and Wildlife Service
Pages 1 Pages

Holdings

[Add Holdings](#) 

Digital

Erie_2_Seneca_Division_NWR_1993.pdf

[Replace](#) [Download](#) [Details](#) [Edit](#)



Benefits of the Project

- Valuable maps now preserved in ServCat
 - Illustrate the history of land ownerships within FWS
- Easy to search for and access the maps
- Hard copies can be sent to the National Archives





Benefits of Batch Uploading

- Batch import is ~50% faster than manual entry
 - Utilize metadata already written
 - Automated some data entry for common metadata fields
 - Import scripts can be reused
- Consistent metadata = Discoverable documents



Acknowledgements

Thanks to Ron Salz, Peter Harms, Cadastral Data Working Group, Lynn Poulin, and Richard Easterbrook for their work on this project

