
Parallelspace Corporation

Technical Note TN0028

SPS2003 XML Import-Export "Operation" Attribute

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Abstract

The format of the XML export files created by the Microsoft SharePoint Portal Server 2003 (SPS2003) Update.exe command provides adequate support for single-shot content migration from SharePoint Portal 2001 (SPS2001) to SPS2003. However, for most practical enterprise migration scenarios, SPS2003 needs to provide better support for the co-existence phase that is part of every content migration project.

As a bare minimum, the SPS2003 XML Import-Export File schema needs an operation attribute to support the continuous content migration that takes place during co-existence phase of an SPS2001 to SPS2003 migration project.

This bare minimum level of support does *not* imply that the corresponding functionality has to be implemented in the first release of the SPS2003 import or export tools.

Ideally, Update.exe would add an operation="create" attribute to each item exported into the XML Import-Export files (regardless of whether the corresponding import functionality is added in the SPS2003 timeframe).

Details and samples of the operation attribute are included in the document.



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INTRODUCTION

The format of the XML export files created by the Microsoft SharePoint Portal Server 2003 (SPS2003) Update.exe command provides adequate support for single-shot content migration from SharePoint Portal 2001 (SPS2001) to SPS2003. However, for most practical enterprise migration scenarios, SPS2003 needs to provide better support for the co-existence phase that is part of every content migration project.

As a bare minimum, the SPS2003 XML Import-Export File schema needs an operation attribute to support the continuous content migration that takes place during co-existence phase of an SPS2001 to SPS2003 migration project.

This bare minimum level of support does *not* imply that the corresponding functionality has to be implemented in the first release of the SPS2003 import or export tools.

Ideally, Update.exe would add an operation="create" attribute to each item exported into the XML Import-Export files (regardless of whether the corresponding import functionality is added in the SPS2003 timeframe). This will enable partner developed third-party tools to use the Update.exe exported XML files for enterprise co-existence scenarios as well as the continuous content migration phase of enterprise migration projects. At Parallelspace, this is particular important as part of our Accelerated Content Migration Service packaged service offering for Microsoft customers wanting to migrate away from competitive document management solutions. (e.g. Xerox Docushare, PC-DOCs, file servers and custom line-of-business applications).

operation Attribute

The technical note proposes the addition of an operation attribute to the XML emitted for each exported item by the SPS2003 Upgrade.exe tool. The schema for the operation attribute would include the following operations:

- operation="create"
- operation="delete"
- operation="remove"
- operation="replace"
- operation="update"
- operation="add"
- operation="merge"
- operation="ignore"

The following is a sample of an SPS2003 Import-Export File created for a Content Source:

```
<V1Workspace>
  <Server Name="PSN-W2K-006B"/>
  <Workspace Name="psntest1"/>
  <ContentSource operation="create" URL="http://psn-w2k-006b/psntest1/Management/Content Sources/WWW-GROOVE-NET" SA="http://www.groove.net"/>
  <ContentSource operation="create" URL="http://psn-w2k-006b/psntest1/Management/Content Sources/Workspace Applications" SA="\\.\backofficestorage\localhost\SharePoint Portal Server\APPLICATIONS\psntest1"/>
  <ContentSource operation="create" URL="http://psn-w2k-006b/psntest1/Management/Content Sources/psntest1" SA="\\.\backofficestorage\localhost\SharePoint Portal Server\workspaces\psntest1"/>
  <GatherManager PerformanceLevel="3" UserAgent="Mozilla/4.0 (compatible; MSIE 4.01; Windows NT; MS Search 4.0 Robot) Microsoft" From="mwherman@parallelspace.net"/>
  <Exchange55 Server="" OWARoot="" Site="" Enterprise="" Domain="" User=""/>
</V1Workspace>
```

operation Attribute Values

operation Attribute Values	Description	Pre-delete Existing Item	Create New Item
operation="delete"	Delete deletes an existing item imported into SPS2003 during a previous execution of the Import tool; or fails if the item doesn't exist.	No	No
operation="remove"	Delete deletes an existing item imported into SPS2003 during a previous execution of the Import tool, if it exists.	No	No
operation="create"	Create creates a new instance of the exported item; or fails if the item already exists (see replace, update and add)	No	Yes
operation="replace"	Replace replaces an existing item imported into SPS2003 during a previous execution of the Import tool by executing a Delete followed by a Create; or fails if the item doesn't exist.	Yes	Yes
operation="add"	Add a) <u>creates</u> a new instance of the exported item if the item does *not* exist; or b) <u>replaces</u> an item if the item was imported into SPS2003 during a previous execution of the Import tool. This operation shouldn't fail based on previous import operations	a) No b) Yes	a) Yes b) Yes
operation="merge"	Add a) <u>creates</u> a new instance of the exported item if the item does *not* exist; or b) <u>updates</u> an item if the item was imported into SPS2003 during a previous execution of the Import tool. This operation shouldn't fail based on previous import operations	a) No b) No	a) Yes b) No

operation="update"	Update adds or replaces <u>the values</u> of selected attributes of an existing item imported intoSPS2003 during a previous execution of the Import tool; or fails if the item doesn't exit.	No	No
operations="ignore"	Processing for this item is skipped. The contents of the item are ignored.	n/a	n/a

Alternate Design

Design Points

- Check for existence first
- Branch on existence
- Branch on operation
- Then Branch on bForcePreDeleteExistingItem (if applicable for operation)

RemoveItemEx(bForcePreDeleteExistingItem, ...)

// Assumption: Existing item
Delete = RemoveItemEx(true, ... succeeds
Remove = RemoveItemEx(false, ... succeeds

// Assumption: No existing item
Delete = RemoveItemEx(true, ... fails
Remove = RemoveItemEx(false, ... succeeds

AddItemEx(bForcePreDeleteExistingItem, ...)

// Assumption: Existing item
Create = AddItemEx(false, ...) fails
Replace = AddItemEx(true, ...) succeeds

// Assumption: No existing item
Create = AddItemEx(false, ...) succeeds
Replace = AddItemEx(true, ...) succeeds

UpdateItemValuesEx(bForcePreDeleteExistingItem ...)

// Assumption: Existing item
Merge = UpdateItemValuesEx(false ...) succeeds
Update = UpdateItemValuesEx(true, ...) succeeds

// Assumption: No existing item
Merge = UpdateItemValuesEx(false ...) succeeds
Update = UpdateItemValuesEx(true, ...) fails

SAMPLES

The following samples are based on a subset of the exported files created by the SPS2003 Beta 2 Update.exe tool.

psntest1_Categories.XML

```
<V1Categories Count="9">
```

```
  <Category operation="create" Name=":Animal" Description="This is a category. A category is a place where documents on a related topic can be grouped together. Portal users can browse through the categories to find documents of interest. The workspace coordinator can create, manage and delete categories using Web folders." ContactName="" ContactEmail="">
```

```
    <Category operation="create" Name=":Animal:Mammal" Description="This is a category. A category is a place where documents on a related topic can be grouped together. Portal users can browse through the categories to find documents of interest. The workspace coordinator can create, manage and delete categories using Web folders." ContactName="" ContactEmail=""/>
```

```
    <Category operation="create" Name=":Animal:Reptile" Description="This is a category. A category is a place where documents on a related topic can be grouped together. Portal users can browse through the categories to find documents of interest. The workspace coordinator can create, manage and delete categories using Web folders." ContactName="" ContactEmail=""/>
```

```
</Category>
```

```
<Category operation="create" Name=":Mineral" Description="This is a category. A category is a place where documents on a related topic can be grouped together. Portal users can browse through the categories to find documents of interest. The workspace coordinator can create, manage and delete categories using Web folders." ContactName="" ContactEmail="">
```

```
  <Category operation="create" Name=":Mineral:Gold" Description="" ContactName="" ContactEmail=""/><Category Name=":Mineral:Silver" Description="" ContactName="" ContactEmail=""/>
```

```
</Category>
```



```
<Category operation="create" Name=":Vegetable" Description="This
is a category. A category is a place where documents on a related
topic can be grouped together. Portal users can browse through
the categories to find documents of interest. The workspace
coordinator can create, manage and delete categories using Web
folders." ContactName="" ContactEmail="">
```

```
<Category operation="create" Name=":Vegetable:Leafy Greens"
Description="" ContactName="" ContactEmail=""/>
```

```
<Category operation="create" Name=":Vegetable:Tubers"
Description="" ContactName="" ContactEmail=""/>
```

```
</Category>
```

```
</V1Categories>
```

psntest1_Categories_\$(Animal)\$Reptile.XML

```
<V1CategoryDocuments Count="5">
```

```
<Item operation="create" Href="http://psn-w2k-
006b/psntest1/Documents/Red/XML%201.0%20Content.xml"
DisplayName="XML 1.0 Content.xml" Description="" Title="Red Stuff
- Reptiles"/>
```

```
<Item operation="create" Href="http://psn-w2k-
006b/psntest1/Documents/Red/MS%20Wordpad%20W2K%20SP2%20Content-
Unicode.txt" DisplayName="MS Wordpad W2K SP2 Content-Unicode.txt"
Description="" Title="Red Stuff - Reptiles"/>
```

```
<Item operation="create" Href="http://psn-w2k-
006b/psntest1/Documents/Red/MS%20Wordpad%20W2K%20SP2%20Content.tx
t" DisplayName="MS Wordpad W2K SP2 Content.txt" Description=""
Title="Red Stuff - Reptiles"/>
```

```
<Item operation="create" Href="http://psn-w2k-
006b/psntest1/Documents/Red/MS%20Wordpad%20W2K%20SP2%20Content.rtf"
DisplayName="MS Wordpad W2K SP2 Content.rtf" Description=""
Title="Red Stuff - Reptiles"/>
```

```
<Item operation="create" Href="http://psn-w2k-
006b/psntest1/Documents/Red/MS%20Wordpad%20W2K%20SP2%20Content.do
c" DisplayName="MS Wordpad W2K SP2 Content.doc" Description=""
Title="Red Stuff - Reptiles"/>
```

```
</V1CategoryDocuments>
```

psntest1_search2.xml

```
<V1Workspace>
```

```
<Server Name="PSN-W2K-006B"/>
```

```
<Workspace Name="psntest1"/>
```

```
<ContentSource operation="create" URL="http://psn-w2k-
006b/psntest1/Management/Content Sources/WWW-GROOVE-NET"
SA="http://www.groove.net"/>
```

```
<ContentSource operation="create" URL="http://psn-w2k-
006b/psntest1/Management/Content Sources/Workspace Applications"
SA="\\.\backofficestorage\localhost\SharePoint Portal
Server\APPLICATIONS\psntest1"/>
```

```
<ContentSource operation="create" URL="http://psn-w2k-
006b/psntest1/Management/Content Sources/psntest1"
SA="\\.\backofficestorage\localhost\SharePoint Portal
Server\workspaces\psntest1"/>
```

```
<GatherManager PerformanceLevel="3" UserAgent="Mozilla/4.0
(compatible; MSIE 4.01; Windows NT; MS Search 4.0 Robot)
Microsoft" From="mwherman@parallelspace.net"/><Exchange55
Server="" OWARoot="" Site="" Enterprise="" Domain="" User=""/>
```

```
</V1Workspace>
```

psntest1_Security.XML

```
<V1Security>
```

```
  <Coordinators>
```

```
    <Coordinator operation="create" Account="PSN-W2K-006B\Administrator"/>
```

```
  </Coordinators>
```

```
  <Approvers/>
```

```
  <Authors/>
```

```
  <Readers>
```

```
    <Reader operation="create" Account="\Everyone"/>
```

```
  </Readers>
```

```
</V1Security>
```

THE FUTURE: WHY NOT SOAP?

Use the SPS2003 XML Web Services Wire Format

Adding the operation attribute SPS2003 Import-Export File schema enables it to become yet another XML specification for specifying methods to be invoked on an object (SPS2003). Why have a separate XML schema for this? Why not just use a physical file format (schema) that is the same as the XML wire format used by SPS2003's existing XML Web Services wire format? That is, why not use SOAP envelopes, bodies and messages

(http://www.w3schools.com/soap/soap_body.asp).

This approach would help unify the many ways that already exist for programmatic access the SharePoint 2003 platform (e.g. OM, Web Services, Import-Export Files, legacy HTTP RPC) and avoid the potential disconnects that develop between when there are too many working parts and too many product teams involved.