

Digital Forever

Preserving Victoria's records

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Agenda

Part 1

Build capacity to respond to future opportunities and challenges

Part 2

Complete, authentic and reliable evidence of government

Part 3

Preserve and make accessible permanent value digital records

Part 1

Build capacity to respond to future opportunities and challenges

Victorian Electronic Records Strategy (VERS)

- *Refreshed Strategy*
- *Revised Archival Control Model*
- *Technology Upgrade*

Victorian Electronic Records Strategy (VERS)

Digital First

Ensuring that recordkeeping processes support a born-digital, stay digital approach and paper records are no longer produced.

Digital Forever

Ensuring that digital information of long-term and continuing value is preserved so that it remains accessible and usable over time.

Digital Recordkeeping by Design

Ensuring that recordkeeping requirements are factored into the design of business systems that manage records.

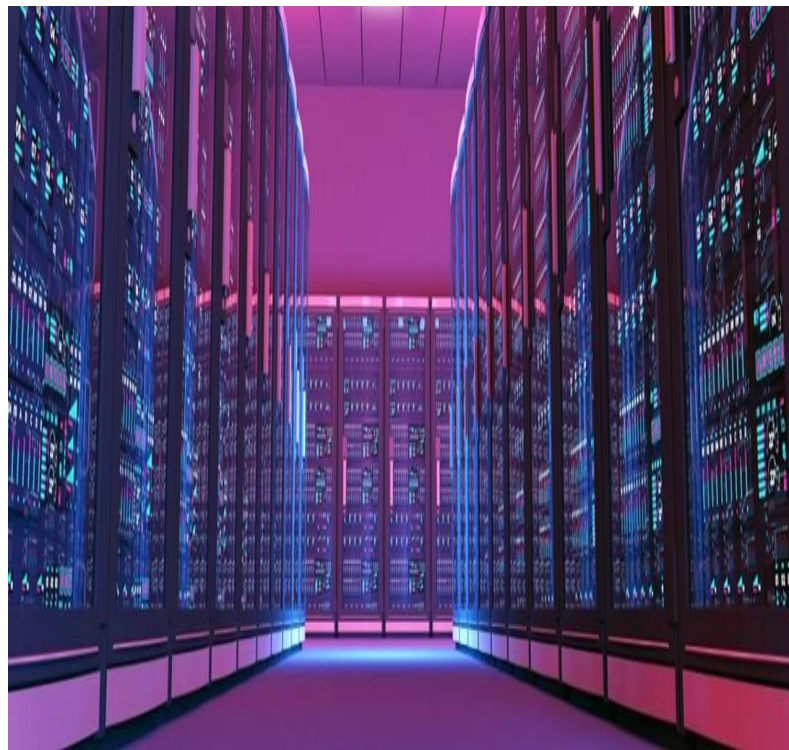


VERS is about ensuring the creation, capture and preservation of authentic, complete and meaningful digital records by the Victorian public sector.

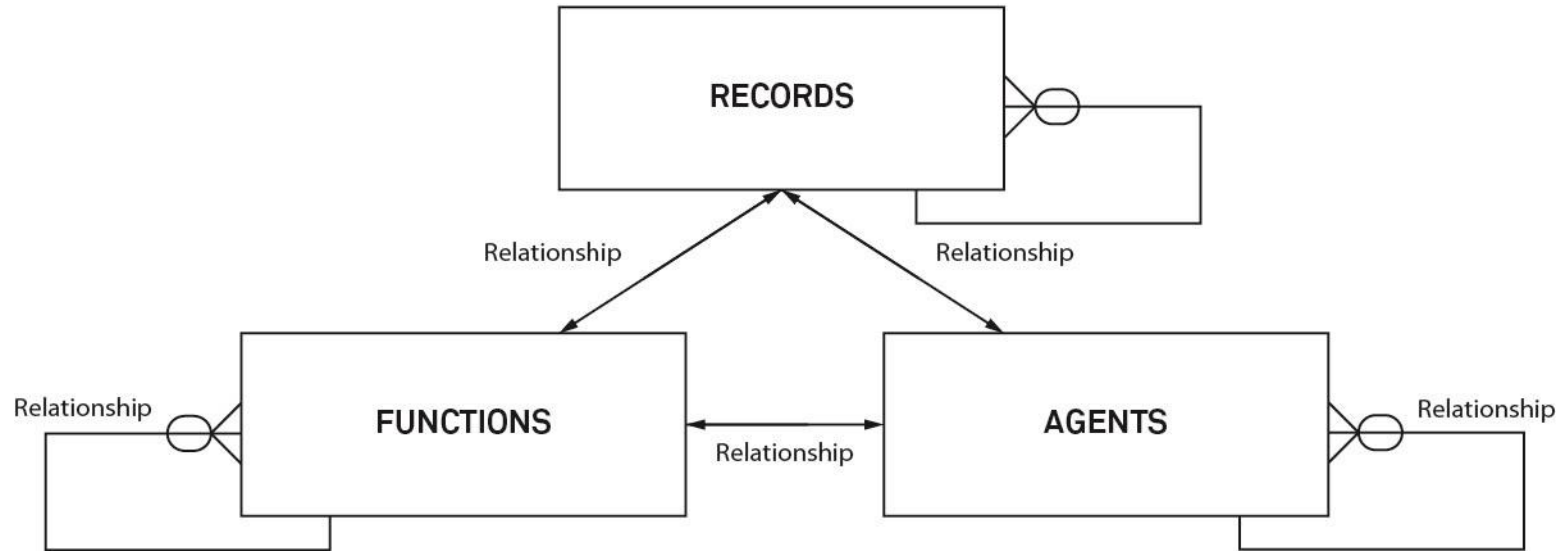


PROV has revised its conceptual approach to digital preservation and we're updating our technology accordingly.

- Revised Archival Control Model (RACM)
- 2015 Standard for the Encapsulation of Digital Information (known as VERS 3)



Revised Archival Control Model



Digital Archive Program Systems

PRESERVE



MANAGE

ARCHIVAL MGMT
SYSTEM

DIGITAL ARCHIVE
MGMT SYSTEM

WAREHOUSE
MGMT SYSTEM

PERSISTENT
IDENTIFIER SERVICE

IDENTITY AND ACCESS MGMT SYSTEM

ACCESS

WEBSITE

API
GATEWAY

SEARCH
ENGINE

SAMS

PAYMENT
SYSTEM

CROWD-
SOURCING

TRANS-
SCRIPTION

IMAGE
VIEWER

RECORD
REQUEST

USE

PUBLIC



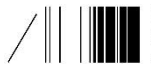
GOV'T



RESEARCH
COMMUNITY



PEER
ORG'S

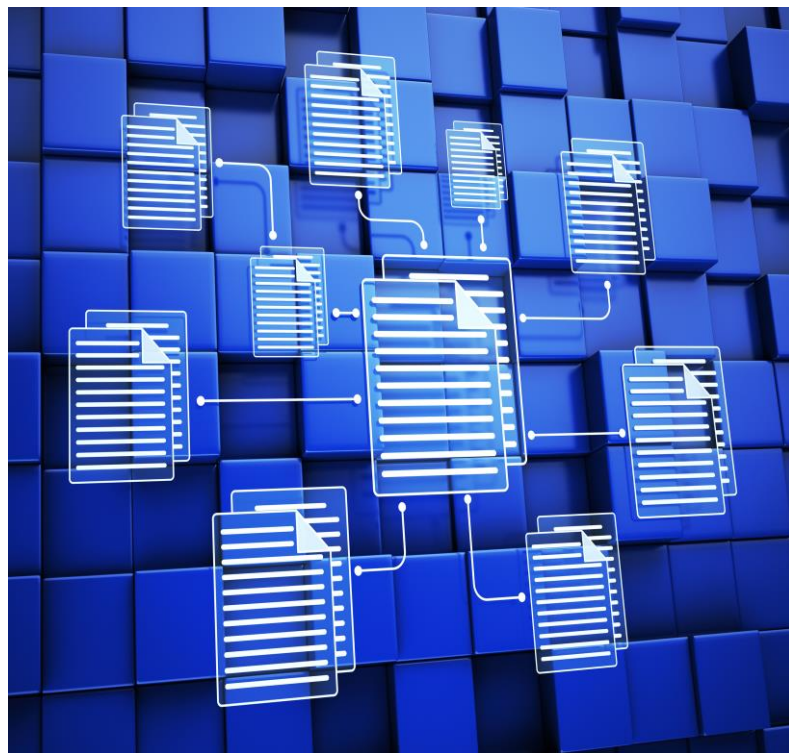


Part 2
***Complete, authentic and
reliable evidence of
government***

Design and embed digital recordkeeping

We are revising and streamlining our recordkeeping standards by:

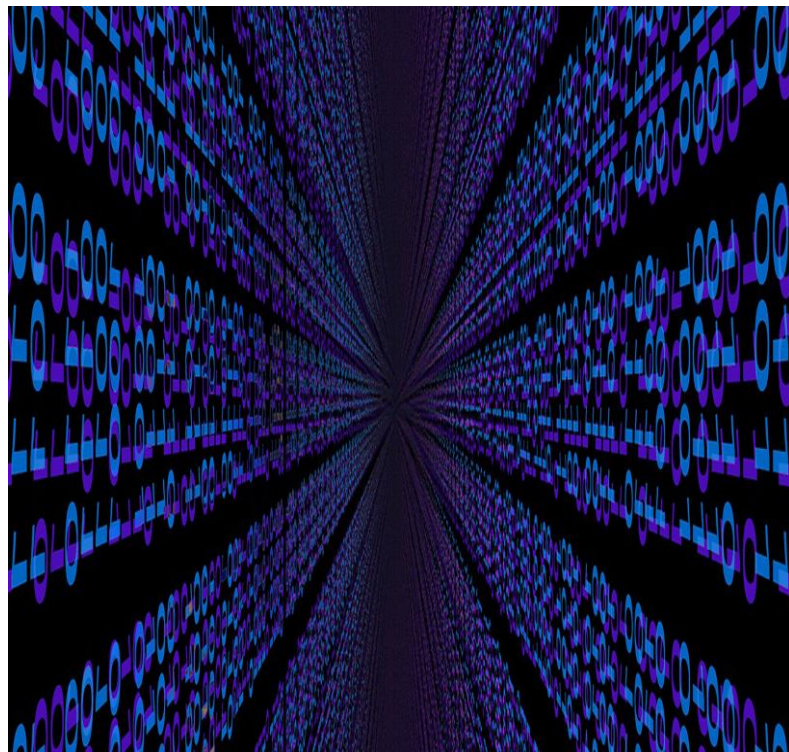
- incorporating the VERS requirements (2015 Standard) into the general recordkeeping standards
- reducing the number of principles and requirements
- simplifying the wording and removing repetition.



Design and embed digital recordkeeping (2)

We are also:

- defining and publishing a minimum metadata set for agency recordkeeping and transfer of records
- releasing the Recordkeeping Assessment Tool (RKAT)
- developing a digital recordkeeping transition roadmap
- issuing digitisation and authorised disposal advice.



Online Communications

We are producing a range of online communications to support recordkeeping in Victorian Government

- Twitter @PROV_RKS
- LinkedIn
- PROV Bytes Newsletter
- Blogs
- Website



Online Communications: Website

We have developed comprehensive advice and guidance for Victorian Government on our website

<https://www.prov.vic.gov.au/recordkeeping-government>



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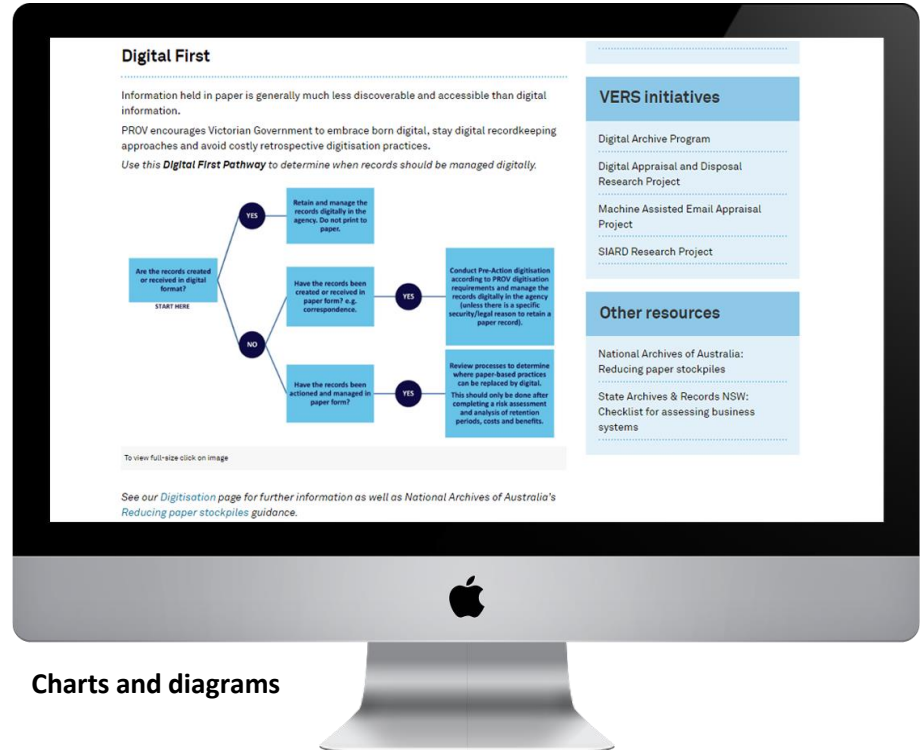


Step-by-step instructions

Online Communications: Website

We have developed comprehensive advice and guidance for Victorian Government on our website

<https://www.prov.vic.gov.au/recordkeeping-government>



Charts and diagrams



Part 3

*Preserve and make
accessible permanent
value digital records
through transfer*

Undertaking transfer tasks



Practical steps to digital transfer

1. **Confirm** records are eligible for transfer
2. **Investigate** options for generating VERS Encapsulated Objects (VEOs)
3. **Submit** transfer proposal to PROV
4. **Identify** and describe the record series
5. **Finalise** access arrangements
6. **Generate** compliant VEOs
7. **Prepare** VEOs for delivery to PROV
8. **Deliver** VEOs to PROV
9. **Resubmit** any VEOs found to have errors
10. **Close** the transfer project



Administrative transfer tasks

Tasks	What is involved?
Confirming eligibility	<i>Records are sentenced as permanent against the appropriate Retention & Disposal Authority.</i>
Proposing the transfer	<i>Paperwork is submitted to PROV to propose the transfer of permanent records.</i>
Describing the records	<i>The records are described in detail including function, arrangement, how to search/use, and any quirks.</i>
Getting access signed off	<i>Arrangements are made for the records to be open or closed to public access once at PROV. If closed, sign off is required from the responsible minister.</i>



Technical transfer tasks

Tasks	What is involved?
Deciding how to make VEOs	<i>Identify whether your recordkeeping system has a module capable of exporting records as VEOs or whether VEOs will be generated manually.</i>
Testing, testing, testing	<i>Once an approach has been decided, multiple rounds of testing will ensure the VEOs meet our requirements.</i>
Generating compliant VEOs	<i>Generate a 'final' or 'production' set of VEOs for transfer to PROV.</i>
Re-generating error VEOs	<i>If any VEOs fail to meet our requirements, these are fixed and resubmitted to PROV.</i>



Expertise required

Two types of expertise are generally required for a successful digital transfer:

1. Familiarity with the function, contents and quirks of the records
2. Ability to understand and use the technical tools and language of digital transfer

These are not always found in the same person, and level of skill required can vary depending on the complexity of the transfer.



Creating compliant VEOs



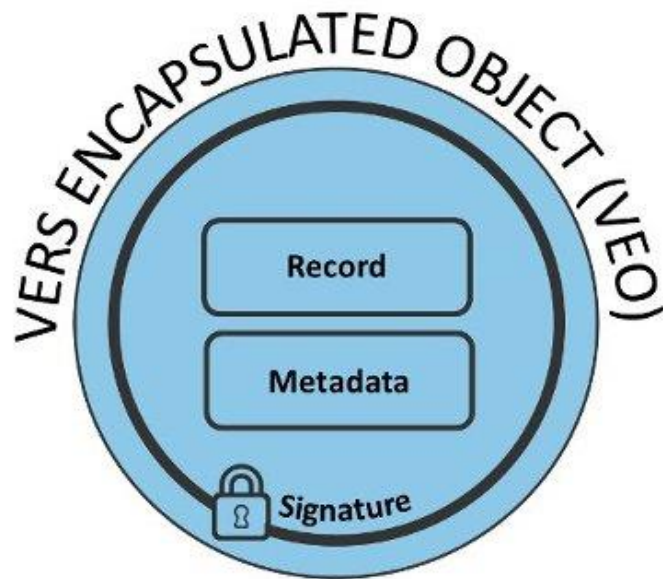
Digital records are transferred as VEOs

VEOs = VERS Encapsulated Objects

Victoria's long-term format for digital records

VEOs:

- are made up of digital **records** in an approved long-term preservation format
- feature contextual information (**metadata**) about the records
- are **signed** using digital certificate technology to ensure integrity.



PROV currently supports two types of VEOs

Type	Supporting Standard	Description
VERSION 2	VERS 2 Standard: <i>PROS 99/007 Management of Electronic Records Standard</i>	<ul style="list-style-type: none">• VEO expressed in XML• Specific VERS metadata• Supports only two levels – files and records
VERSION 3 (neoVEO)	VERS 3 Standard: <i>PROS 15/03 Standard for the encapsulation of digital information</i>	<ul style="list-style-type: none">• VEOS expressed as a .ZIP file• Metadata can be in AGLS or AS/NZS 5478• Supports multi-level, hierarchical record structures

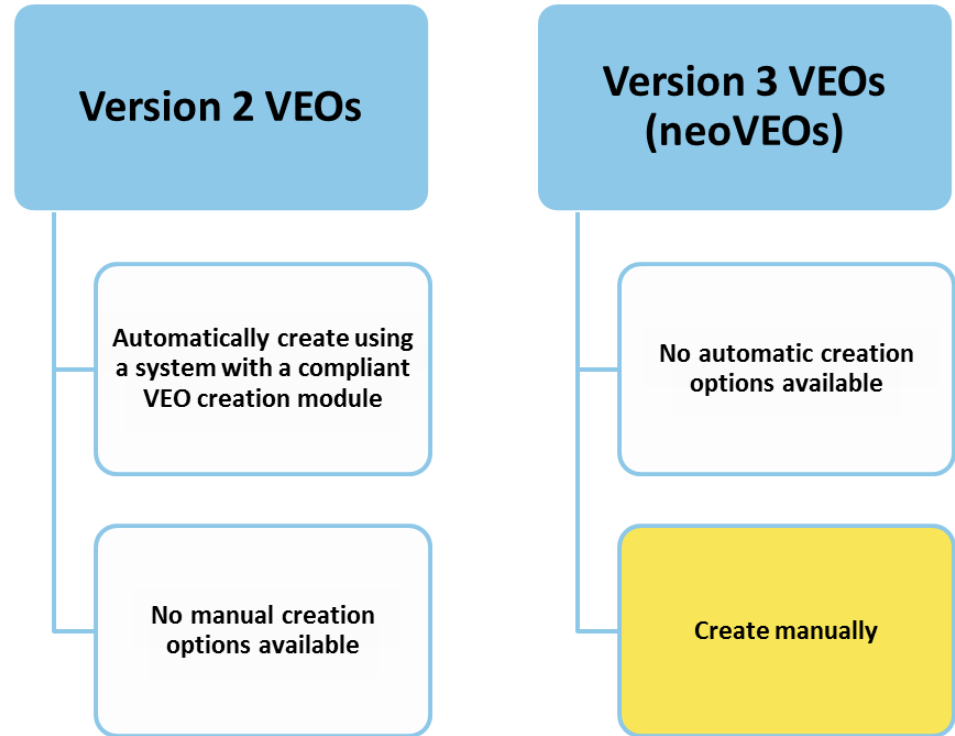


VEO creation options

These are the current options for creating VEOs:

- Automatic creation using a vendor-developed VEO creation module
- Manual creation using PROV-developed tools (e.g. the neoVEO toolkit and neoVEO app)

Both options require good records and data to ensure the output meets PROV's Standards.



Metadata requirements

VEOs must contain metadata to give contextual information about the records they preserve.

The two main metadata standards used are:

1. Australian Government Locator Service (AGLS) for Victoria
2. Recordkeeping metadata property reference set (AS/NZS 5478)

Additional metadata standards, including bespoke agency standards, can also be used if there is good reason to do so.
















Preparing your metadata

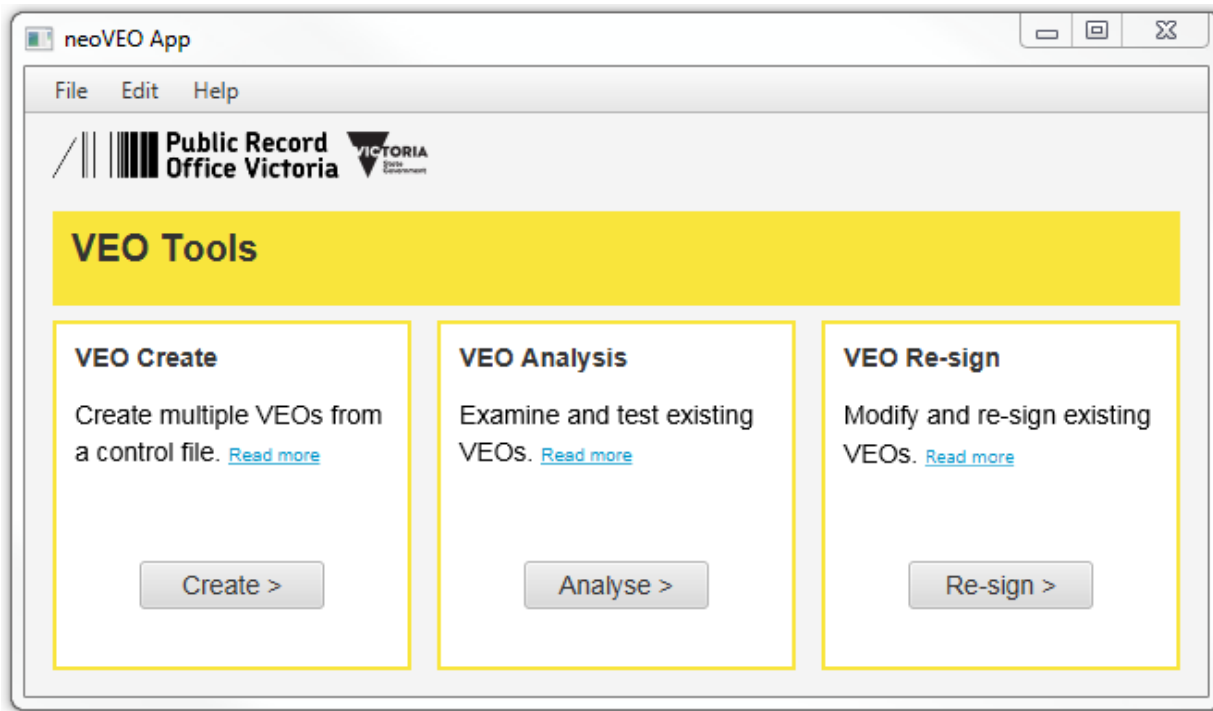
	A	B	C	D	E	F	G	
	VEO	VEOName	Label	Template	File Name	Title	Date	ShortDescription
1	VEO	20160608-Resi-Care	Audit Report	Metadata-Template	20160608-Resi-Care	Follow up of Residential Care Services for Children	2016-06-08	This follow-up audit examined the progress the Dep
2	VEO	20160608-Annual-Plan	Audit Report	Metadata-Template	20160608-Annual-Plan	Annual Plan 2016-17	2016-06-08	Section 7A of the Audit Act 1994 requires the Auditor
3	VEO	20160817-Food-Fibre	Audit Report	Metadata-Template	20160817-Food-Fibre	Enhancing Food and Fibre Productivity	2016-08-17	The audit objective was to assess the extent to whic
4	VEO	20160831-Audit-Committees	Audit Report	Metadata-Template	20160831-Audit-Committees	Audit Committee Governance	2016-08-31	This audit examined the effectiveness of governanc
5	VEO	20160914-Ramsar-Wetlands	Audit Report	Metadata-Template	20160914-Ramsar-Wetlands	Meeting Obligations to Protect Ramsar Wetlands	2016-09-14	This audit assessed how effectively Victoria's Rams
6	VEO	20161012-Annual-Report	Audit Report	Metadata-Template	20161012-Annual-Report	Annual Report 2015-16	2016-10-12	This Annual Report describes the functions and oper
7	VEO	20161012-Annual-Report	Audit Report	Metadata-Template	20161012-Annual-Report	Annual Report 2015-16 Appendix one: Key Audit Themes	2016-10-12	Appendix one of the Annual Report discussed our ke



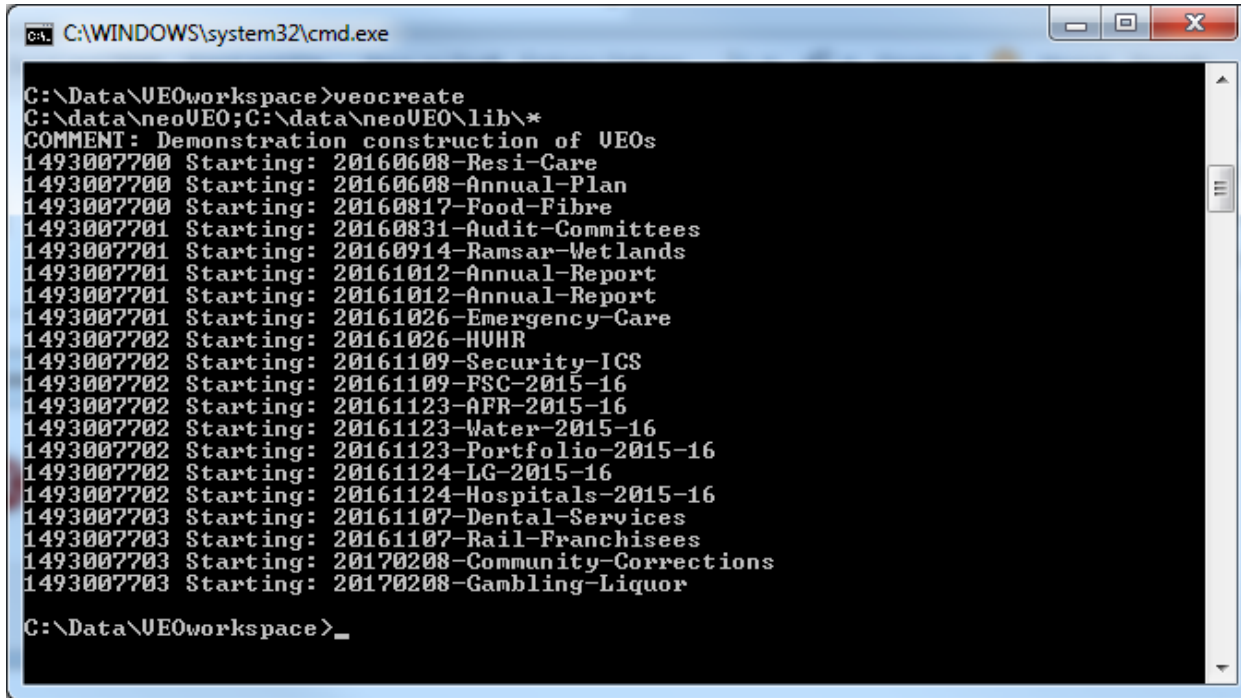
Preparing your records

Name	Date modified	Type	Size
 20160608-Annual-Plan.pdf	2/03/2017 3:44 PM	Adobe Acrobat D...	3,669 KB
 20160608-Resi-Care.pdf	2/03/2017 3:40 PM	Adobe Acrobat D...	1,207 KB
 20160817-Food-Fibre.pdf	2/03/2017 3:44 PM	Adobe Acrobat D...	2,964 KB
 20160831-Audit-Committees.pdf	2/03/2017 3:44 PM	Adobe Acrobat D...	7,213 KB
 20160914-Ramsar-Wetlands.pdf	2/03/2017 3:45 PM	Adobe Acrobat D...	2,129 KB
 20161012-Annual-Report.pdf	2/03/2017 3:45 PM	Adobe Acrobat D...	2,437 KB
 20161012-Annual-Report-appendices.pdf	2/03/2017 3:51 PM	Adobe Acrobat D...	152 KB
 20161026-Emergency-Care.pdf	2/03/2017 3:45 PM	Adobe Acrobat D...	3,636 KB
 20161026-HVHR.pdf	2/03/2017 3:45 PM	Adobe Acrobat D...	1,666 KB
 20161107-Dental-Services.pdf	2/03/2017 3:46 PM	Adobe Acrobat D...	3,197 KB
 20161107-Rail-Franchisees.pdf	2/03/2017 3:47 PM	Adobe Acrobat D...	2,458 KB
 20161109-FSC-2015-16.pdf	2/03/2017 3:45 PM	Adobe Acrobat D...	1,566 KB
 20161109-Security-ICS.pdf	2/03/2017 3:45 PM	Adobe Acrobat D...	2,280 KB

VEO creation using the neoVEO app



VEO creation using command line interface



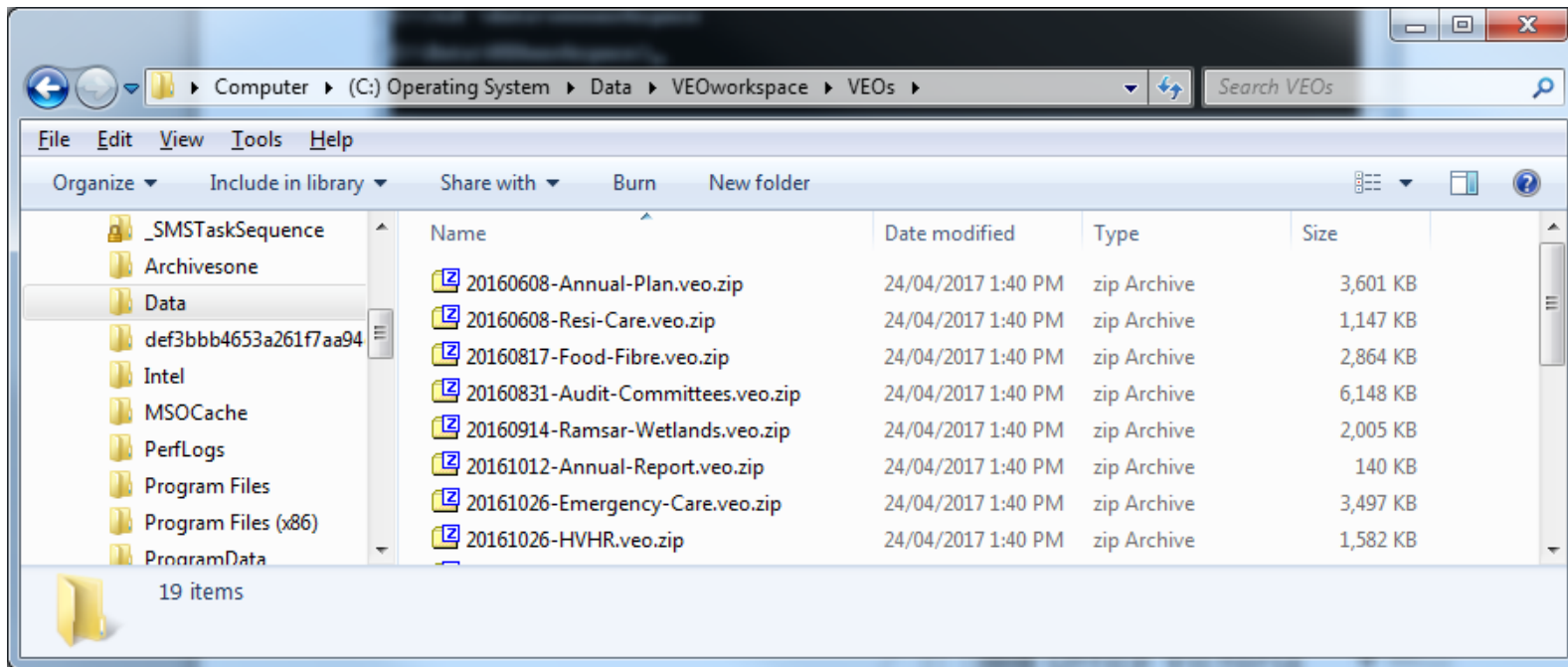
```
C:\WINDOWS\system32\cmd.exe

C:\Data\VEOworkspace>veo create
C:\data\neoVEO;C:\data\neoVEO\lib\*
COMMENT: Demonstration construction of VEOs
1493007700 Starting: 20160608-Resi-Care
1493007700 Starting: 20160608-Annual-Plan
1493007700 Starting: 20160817-Food-Fibre
1493007701 Starting: 20160831-Audit-Committees
1493007701 Starting: 20160914-Ramsar-Wetlands
1493007701 Starting: 20161012-Annual-Report
1493007701 Starting: 20161012-Annual-Report
1493007701 Starting: 20161026-Emergency-Care
1493007702 Starting: 20161026-HUHR
1493007702 Starting: 20161109-Security-ICS
1493007702 Starting: 20161109-FSC-2015-16
1493007702 Starting: 20161123-AFR-2015-16
1493007702 Starting: 20161123-Water-2015-16
1493007702 Starting: 20161123-Portfolio-2015-16
1493007702 Starting: 20161124-LG-2015-16
1493007702 Starting: 20161124-Hospitals-2015-16
1493007703 Starting: 20161107-Dental-Services
1493007703 Starting: 20161107-Rail-Franchisees
1493007703 Starting: 20170208-Community-Corrections
1493007703 Starting: 20170208-Gambling-Liquor

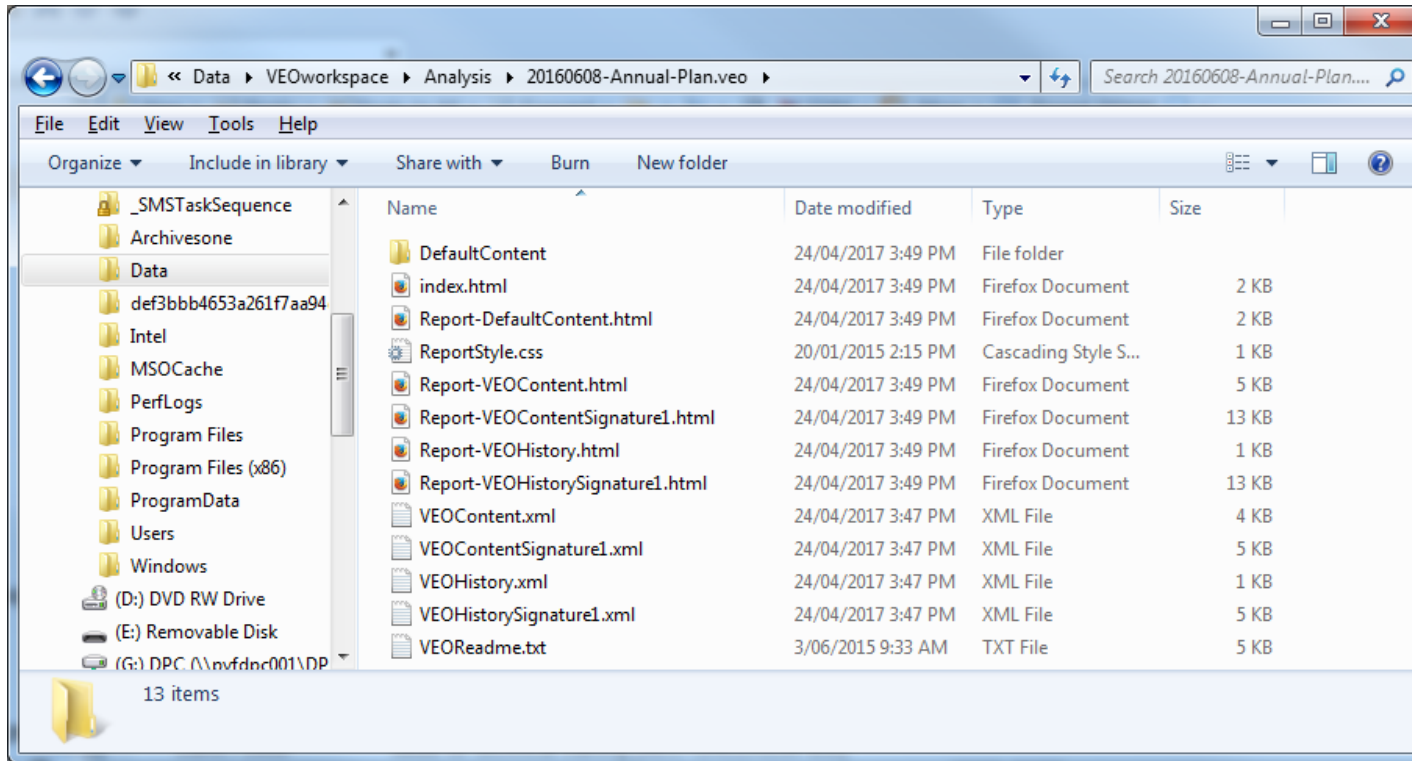
C:\Data\VEOworkspace>_
```



Output of the VEO creation process



Inside a VEO: structure



Inside a VEO: content

```
1 <?xml version="1.0" encoding="UTF-8" standalone="no" ?>
2 <vers:VEOContent
3   xmlns:vers="http://www.prov.vic.gov.au/VERS">
4     <vers:Version>3.0</vers:Version>
5     <vers:HashFunctionAlgorithm>SHA-1</vers:HashFunctionAlgorithm>
6     <vers:InformationObject>
7       <vers:InformationObjectType></vers:InformationObjectType>
8       <vers:InformationObjectDepth>0</vers:InformationObjectDepth>
9       <vers:MetadataPackage xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
10        <vers:MetadataSchemaIdentifier>http://prov.vic.gov.au/vers/schema/AGLS</vers:MetadataSchemaIdentifier>
11        <vers:MetadataSyntaxIdentifier>http://www.w3.org/1999/02/22-rdf-syntax-ns</vers:MetadataSyntaxIdentifier>
12        <rdf:RDF xmlns:dcterms="http://purl.org/dc/terms/"
13         xmlns:aglstterms="http://www.agls.gov.au/agls/terms/"
14         <rdf:Description rdf:about="http://www.example.org/123">
15           <dcterms:creator>Creator1</dcterms:creator>
16           <dcterms:date rdf:datatype="xsd:date">2018-08-13T11:43:06+10:00</dcterms:date>
17           <dcterms:title>Title1</dcterms:title>
18           <dcterms:identifier>Identifier1</dcterms:identifier>
19           <dcterms:publisher>Publisher1</dcterms:publisher>
20         </rdf:Description>
21       </rdf:RDF>
22     </vers:MetadataPackage>
23     <vers:InformationPiece>
24       <vers:Label></vers:Label>
25     </vers:Label>
26     <vers:ContentFile>
27       <vers:PathName>S-37-6/S-37-6-Nov.docx</vers:PathName>
28       <vers:HashValue>m3AncQftPmN3ApOHPdjd3XEucWI=</vers:HashValue>
29     </vers:ContentFile>
30   </vers:InformationPiece>
31 </vers:InformationObject>
32 </vers:VEOContent>
```



Questions?

More information:

<https://www.prov.vic.gov.au/recordkeeping-government/>

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