

VTC

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PRIMAR paper S-102PT16

S102PT16 Cancellation support clarification

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S-102PT16 Cancellation support clarification



- S-100 supports 2 mechanisms for cancellations of datasets:
 1. S-100 describes this file-based cancellation in chapter 17-4.4.1:

In addition to fileless dataset cancellation using fields in the Catalogue metadata file a dataset may be cancelled by the Data Producer by the issuing of a cancellation update. In order to cancel a dataset, an update dataset file is created for which the Edition number must be set to 0. This method is only used to cancel a Base dataset file. Where a dataset is cancelled and its name is reused at a later date, the issue date must be greater than the issue date of the cancelled dataset. When the dataset is cancelled it must be removed from the system.

- In S-100 it is expected that the end user system will find the information needed in CATALOG.XML – entry point for information in an S-100 defined exchange set.
- Cancellation dataset update **will be** packaged in the exchange set.
- CATALOG.XML contains additional discovery metadata describing that this is a cancellation (Purpose=5).

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- S-100 supports 2 mechanisms for cancellations of datasets:
 2. S-100 describes file-less cancellation in chapter 17-4.1 (text description below figure 17-2):

The conceptual model depicted in Figure 17-2 is very flexible and can be implemented in a variety of ways as virtually all components, except for the S-100_ExchangeCatalogue, are optional. This level of flexibility is essential to properly support the mainstream use case of exchanging geospatial data, as well as the use cases for releasing dataset and support file cancellation notices or new Catalogue releases without any data files present.

- The end user system still find the information needed in CATALOG.XML – entry point for information in an S-100 defined exchange set.
- Cancellation dataset update **is not** packaged in the exchange set.

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- For implementers of S-100 and the various product specifications, it is essential to know which of the cancellation mechanisms the product specification supports, or if it supports both.
- As long as the product specification does not restrict itself to one solution, the anticipation would be that both are supported.
- For S-102, it is stated that cancellation is a type of dataset file (S-102 11.2.1):

11.2.1 Dataset management

Three types of dataset files may be produced and contained within an exchange set:

- New dataset: Initial.
- New edition of a dataset: Includes new information. New editions must cover the same area as its predecessor.
- Cancellation: The dataset is cancelled and no longer available to be displayed or used.

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11.2.1 Dataset management

Three types of dataset files may be produced and contained within an exchange set:

- New dataset: Initial.
- New edition of a dataset: Includes new information. New editions must cover the same area as its predecessor.
- **Cancellation: The dataset is cancelled and no longer available to be displayed or used.**

- This could be interpreted as a file-based cancellation, but as described by S-100, this mechanism requires the use of an update dataset file (with edition number set to 0).
- **S-102 DOES NOT SUPPORT UPDATE DATASET FILES.**
- **This means that currently S-102 has an invalid description of the cancellation mechanism.**

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Solutions:

1. Add support for update dataset files to support the file-based cancellation mechanism.

➤ Must specify to only be used for cancellation

or

2. Further describe the fileless cancellation mechanism

➤ probably remove cancellation as a type of dataset file

➤ NB! There is an identified security breach regarding fileless cancellations - no way to create digital signatures for those types of cancellations – to be discussed at WENDWG14 Feb 2024

or

3. Support both option 1 and 2.

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Conclusions:

- S-102 has an incorrect implementation of the file-based cancellation mechanism.
- S-102PT must consider implementing support for update dataset files to support the file-based cancellation mechanism, or only support the fileless cancellation mechanism.
- There is an identified security breach with the fileless cancellation mechanism that must be taken into consideration before making a decision on how cancellations should work in S-102.
- Either preferred way forward would require clarification to the product specification to clearly define which cancellation mechanism(s) that are supported, and which is not.

Actions:

- Note the paper and discuss the severity of the invalid implementation of the file-based cancellation mechanism.
- Discuss and decide how to implement valid support for cancellations



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Thank you for your attention

Questions?

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