

# Implementation of NIST 1500-100 Election Results Common Data Format by the Ohio Secretary of State

Documentation for Ohio-ENR 1.0.02

## Introduction

The Ohio Secretary of State is making its election results available in a new, XML format known as the NIST 1500-100 Election Results Common Data Format<sup>1</sup>. This specification was developed by a National Institute of Standards and Technology (NIST) working group that included the State of Ohio, with the goal that election management system manufacturers and election jurisdictions incorporate this specification so that election data can be exported in a common format regardless of manufacturer. This will lead to savings in time and money in making election results and other election data available before, during, and after elections. Ohio's implementation of NIST 1500-100 is to a draft version created prior to the final version of 1500-100.

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## How to Read This Document

This document is not designed to be a comprehensive reference to the draft 1500-100 specification as implemented by Ohio. Rather, it is to provide a guide for consumers of Ohio's 1500-100 instance file. With this goal in mind, the XML elements are organized in the order they occur in the instance file, using a depth-first search. Elements and attributes listed for each type indicate a deviation from the draft or an exposition on its implementation. Those elements and attributes not listed can be assumed to be implemented as provided for in the normative references.

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<sup>1</sup> The NIST 1500-100 specification's website is located from <http://www.nist.gov/itl/vote/election-results.cfm>.

## Normative references

The following referenced document is indispensable for the application of this document (i.e., it must be understood and used):

- Draft Standard for Election Results Reporting Data Interchange Format dated June, 2015 (prior version of NIST 1500-100)<sup>2</sup>

## Definitions

**XML:** A computer data format that is both machine and human readable.

**Instance File:** A data file that conforms to the 1622/D1 XML Schema.

## Elements Implemented

### ElectionReport

#### GeneratedDate

This attribute is implemented as a date in the format YYYY-MM-DDTHH:MI:SSZ.

#### Notes

The occurrence of this element has been changed from 0..1 to 0..\*. **This may causes schema validation failure.**

#### Sequence

This attribute is implemented as the constant 0.

#### SequenceEnd

This attribute is implemented as the constant 0.

#### Signature

This element is not implemented Election Night.

#### TestType

This attribute is not implemented.

### GpUnit

ComposingGpUnitIds element is not implemented.

#### GpUnit as implemented by ReportingUnit

#### AuthorityId

This element is not implemented.

#### ContactInformation

This element is implemented when @Type='County'.

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<sup>2</sup> This document is available at <http://www.nist.gov/itl/vote/election-results.cfm>.

### CountStatus

This element is implemented when @Type='County'.

### PartyRegistration

This element is not implemented.

### SubUnitReported

This attribute is implemented when @Type='County'.

### SummaryCounts

This element is implemented when @Type='County'.

### SpatialDimension

This element is not implemented.

### TotalSubUnits

This attribute is implemented when @Type='County'.

## Counts

### GpUnitId

This element is implemented for Counts whose parent is BallotSelection.

### BallotsCast

This attribute is implemented for Counts whose parent is GpUnit.

### Device

This element is not implemented.

## Counts as implemented by SummaryCounts

### BallotsRejected

This attribute is not implemented.

### Overvotes

This attribute is not implemented.

### Undervotes

This attribute is not implemented.

### WriteIns

This attribute is not implemented.

## ContactInformation

### AddressLine

This element is not implemented.

### Email

This element is not implemented.

## Fax

This element is not implemented.

## Name

This element is not implemented.

## Phone

This element is not implemented.

## Schedule

This element is not implemented.

## Uri

This element is implemented under GpUnit when @Type='County'.

## Party

### General

There are certain non-Party relationships that for lack of other means to model them, are modeled as Parties. These include:

- Affiliation of candidates who run in contests that are non-partisan, that is, regardless of partisan affiliation of the candidate, no party affiliation appears next to their name.
- Write-In candidates do not have a party affiliation on the ballot, since by definition, they do not appear on the ballot.
- Candidates independent of any particular party.

## LogoUri

This attribute is not implemented.

## LanguageString

### Language

Language is implemented as the constant en.

## Person

### ContactInformation

This element is not implemented.

### DateOfBirth

This attribute is not implemented.

### FullName

This element is not implemented.

### Gender

This element is not implemented.

### Nickname

This element is not implemented.

Prefix

This element is not implemented.

Profession

This element is not implemented.

Title

This element is not implemented.

Office

ContactInformation

This element is not implemented.

FilingDeadline

This attribute is not implemented.

OfficeHolderId

This element is not implemented.

Term

EndDate

This attribute is not implemented.

Contact

Email

This attribute is not implemented.

Fax

This attribute is not implemented.

Hours

This attribute is not implemented.

Name

This attribute is not implemented.

Phone

This attribute is not implemented.

URL

This attribute is not implemented.

Election

EndDate

This attribute is not implemented.

BallotStyle

This element is not implemented.

### CountStatus

This element is not implemented.

### ElectionScopeld

This element is not implemented. **This may causes schema validation failure.**

### Candidate

#### BallotName

BallotName is built from the following expression:

```
{ Person.firstName * } + { Person.middleName } + { Person.lastName * } + { Person.suffix }
```

The resulting value may or may not be represent the actual ballot name appearing on a given voter's ballot.

### FileDate

This attribute is not implemented.

### Id

This attribute is not implemented.

### IsIncumbent

This attribute is not implemented.

### IsTopTicket

This attribute is implemented when the Candidate is part of a ticket that includes multiple candidates (E.g. Governor).

### PostElectionStatus

This attribute is not implemented.

### SequenceOrder

This attribute is not implemented.

### Contest

#### BallotSubTitle

This element is not implemented.

#### BallotTitle

This element is not implemented.

### CountStatus

This attribute is not implemented.

### HasRotation

This attribute is not implemented.

OtherVoteVariationType

This attribute is not implemented.

SequenceOrder

This attribute is not implemented.

SubUnitsReported

This attribute is not implemented.

SummaryCounts

This element is not implemented.

TotalSubUnits

This attribute is not implemented.

Contest as implemented by BallotMeasureContest

ConStatement

This element is not implemented.

EffectOfAbstain

This element is not implemented.

FullText

This element is not implemented.

PassageThreshold

This element is not implemented.

ProStatement

This element is not implemented.

SummaryText

This element is not implemented.

BallotSelection as implemented by CandidateSelection

EndorsementPartyId

This element is not implemented.

VoteCounts

Generally

The instance file includes multiple levels of aggregation. Therefore, it is crucial that consumers determine which level of aggregation required (e.g. State, County) then select only the VoteCounts corresponding to that geography (GpUnit).

## Elements not implemented

The following elements are not implemented in any part of the instance file.

- BallotStyle

- Device
- Hours
- OrderedContest
- Party as implemented by Coalition
- Contest as implemented by PartyContest
- BallotSelection as implemented by PartySelection
- PartyRegistration
- Contest as implemented by RetentionContest
- GpUnit as implemented by ReportingDevice
- SpatialDimension
- SpatialExtent
- Schedule