The Open Research Communication System Bullet format (ORCS Bullet) is a proposed format for data fields in order to provide a voluntary standard for exchange of sourced/cited research information that allows users to retain original sourcing for use in word processors, link diagrams, geospatial systems, temporal systems, and other systems.

A secondary goal is to teach individuals and small teams how to build their own ORCS Bullet processors that allow humans to drag and drop their researched information. This human created information can easily be exchanged with other systems without losing the original sources of information.

The purpose of ORCS-Bullets is to keep the protocol open. When the protocol is finalized, we would appreciate anyone using “Open Research Communication System Bullet Format” or “ORCS Bullet” to stick to published standards. Use of the protocol without mentioning “Open Research Communication System Bullet Format” or “ORCS Bullet” is fair use.

There are many protocols that use the acronym “ORCS”, please refer use “ORCS Bullet” when applying this format, as ORCS alone is too ambiguous.

Proposed ORCS Bullet format

The smallest version of an ORCS bullet is a 4 part series of text fields (4ORC) with the following labels:

| **Subject** | **Verb** | **Object** | **Source** |
| --- | --- | --- | --- |

The standard bullet has 10 additional fields (BORC)

| **Cite** | **VerbDateTime** | **SubjectType** | **VerbType** | **ObjectType** | **Relationship** | **Attribute** | **BulletHyperlink** | **Classification** | **Notice** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

An externally keyed standard bullet has two additional fields. (KORC)

| **BulletExKey** | **SourcingExKey** |
| --- | --- |
|  |  |

An expanded bullet (XORC) has two headers, two time fields, and nine additional spare fields in the standard protocol. A theoretically infinite number of spare additional fields can be added following.

| **BulletSpareSchema** | **BulletSpareSchemaExKey** |
| --- | --- |

| **BulletSpareDateTime01** | **BulletSpareDateTime02** |
| --- | --- |

| **BulletSpare01** | **BulletSpare02** | **BulletSpare03** | **BulletSpare04** | **BulletSpare05** | **BulletSpare06** | **BulletSpare07** | **BulletSpare08** | **BulletSpare09** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |

Creating an Orcs Bullet Database.

|  |  |  |
| --- | --- | --- |
| **BulletInputTable** | | |
| **Field Name** | **Data Type** | **Description** |
| BulletInKey | AutoNumber | \*Required, non-protocol local key\*. Unique to each individual database. Not transmitted in any ORCS protocols |
| SourceInKey | Number |  |
| BulletPlaneLangSchema | Short Text | \*Optional, Protocol Relationship\* User enabled Schema for PlaneLanguage outputs. |
| Subject | Short Text | \*Optional, Protocol Relationship\* Relates to "Entity" field in the EntityTable. In (English) plain language output this will be the noun/adjective/entity/quality the beginning of a bullet. In a graph outputs this will be a node/vertex/point. |
| Verb | Short Text | Optional. In (English) plain language outputs this will be the verb/connection/relationship in the middle of the bullet. In graph outputs this will be an edge/link/line AND OR be merged as an attribute of the subject |
| Object | Short Text | \*Optional, Protocol Relationship\* Relates to "Entity" field in the EntityTable. In (English) plain language outputs this is the end of a bullet. In graph outputs this will be an edge/link/line AND OR be merged as a attribute of the subject |
| VerbDateTime | Date/Time | Optional date/time for the overall event. For beginning/ending date/times, see user date time fields below |
| SubjectType | Short Text | Optional, example use is for ICONs on nodes in a graph export. Most often will be a common noun. |
| VerbType | Short Text | Optional, example use is for line type or direction in a graph export |
| ObjectType | Short Text | Optional, example use is for line type or direction in a graph export |
| Relationship | Yes/No | Optional, only used for graph output, select if you wish for the to BulletVerb to output as an edge/link/line between the BulletSubject and BulletObject |
| Attribute | Yes/No | Optional, output combines the BulletVerb and BulletObject to be an attribute of the subject instead of an edge/link/line. |
| BulletHyperlink | Hyperlink | Optional hyperlink |
| BulletExKey | Short Text | An optional hash or other formula for external use to distinguish bullets from other bullets outside of organizational protocols. |
| BulletSpareSchema | Short Text | \*Optional, Protocol Relationship\* User enabled Schema for any application |
| BulletSpareSchemaExKey | Short Text |  |
| BulletSpareDateTime01 | Date/Time |  |
| BulletSpareDateTime02 | Date/Time |  |
| BulletSpare01 | Short Text |  |
| BulletSpare02 | Short Text |  |
| BulletSpare03 | Short Text |  |
| BulletSpare04 | Short Text |  |
| BulletSpare05 | Short Text |  |
| BulletSpare06 | Short Text |  |
| BulletSpare07 | Short Text |  |
| BulletSpare08 | Short Text |  |
| BulletSpare09 | Short Text |  |

|  |  |  |
| --- | --- | --- |
| BulletPlnLngSchemaTable | | |
|  |  |  |
| BulletPlnLngSchemaInKey | 1 |  |
| BulletPlnLngSchemaName | Default |  |
| BulletSubjectPrefix | StartSubject> |  |
| BulletSubjectSuffix | <EndSubject |  |
| BulletVerbPrefix | StartVerb> |  |
| BulletVerbSuffix | <EndVerb |  |
| BulletObjectPrefix | StartObject> |  |
| BulletObjectSuffix | <EndObject |  |
| BulletSourcePrefix | StartSource> |  |
| BulletSourceSuffix | <EndSource |  |
| BulletClassificationPrefix | StartClass> |  |
| BulletClassificationSuffix | <EndClass |  |
| BulletCitePrefix | StartCite> |  |
| BulletCiteSuffix | <EndCite |  |
| BulletPlnLngSchemaExKey | e48efd074970a1abeb7ee5ce1a1c76c6 |  |

BulletSpareSchemaInKey BulletSpareSchemaName BulletSpare01Format BulletSpare02Format BulletSpare03Format BulletSpare04Format BulletSpare05Format BulletSpare06Format BulletSpare07Format BulletSpare08Format BulletSpare09Format BulletSpareDateTime01Description BulletSpareDateTime02Description

2 MGRS MGRS (NLLLNNNNNNNNNN) NOT USED NOT USED NOT USED NOT USED NOT USED NOT USED NOT USED NOT USED NOT USED NOT USED

EntityTypeInKey EntityType

1. Person

| **BulletVerbTypeTable** | |
| --- | --- |
| **ConnectionTypeInKey** | **ConnectionType** |
| 1 | - |
| 2 | > |
| 3 | < |
| 4 | <> |

| **EntityTable** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EntityInKey** | **SourceInKey** | **EntityCommonName** | **EntitySpareSchema** | **EntitySpareSchemaExKey** | **EntitySpare01** | **EntitySpare02** | **EntitySpare03** | **EntitySpare04** | **EntitySpare05** | **EntitySpare06** | **EntitySpare07** | **EntitySpare08** | **EntitySpare09** |
| 1 |  | George Washington |  |  |  |  |  |  |  |  |  |  |  |

| **SourceInputTable** | | | | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SourceInKey** | **Source** | **Classification** | **Cite** | **Title** | **Summary** | **FullText** | **SourceDate** | **SourceAccessedDate** | **SourceSpare01** | **SourceSpare02** | **SourceSpare03** | **SourceSpare04** | **SourceSpare05** | **SourceSpare06** | **SourceSpare07** | **SourceSpare08** | **SourceSpare09** | **SourcingExKey** | **Notice** |
| 2 | Morens, 1999 | Unclass | Morens, David M. (December 1999). "Death of a President". New England Journal of Medicine. 341 (24): 1845–1849. doi:10.1056/NEJM199912093412413. PMID 10588974. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

