

Standards

DIGITAL NAIVES



18. Gulaschprogrammierenacht

10.-13. Mai 2018 | ZKM/HfG Karlsruhe
entropia e.V. / CCC Karlsruhe | gulas.ch

#gpn18

@LEYRER

HOW STANDARDS PROLIFERATE:

(SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC.)

SITUATION:
THERE ARE
14 COMPETING
STANDARDS.

14?! RIDICULOUS!
WE NEED TO DEVELOP
ONE UNIVERSAL STANDARD
THAT COVERS EVERYONE'S
USE CASES.



SOON:

SITUATION:
THERE ARE
15 COMPETING
STANDARDS.

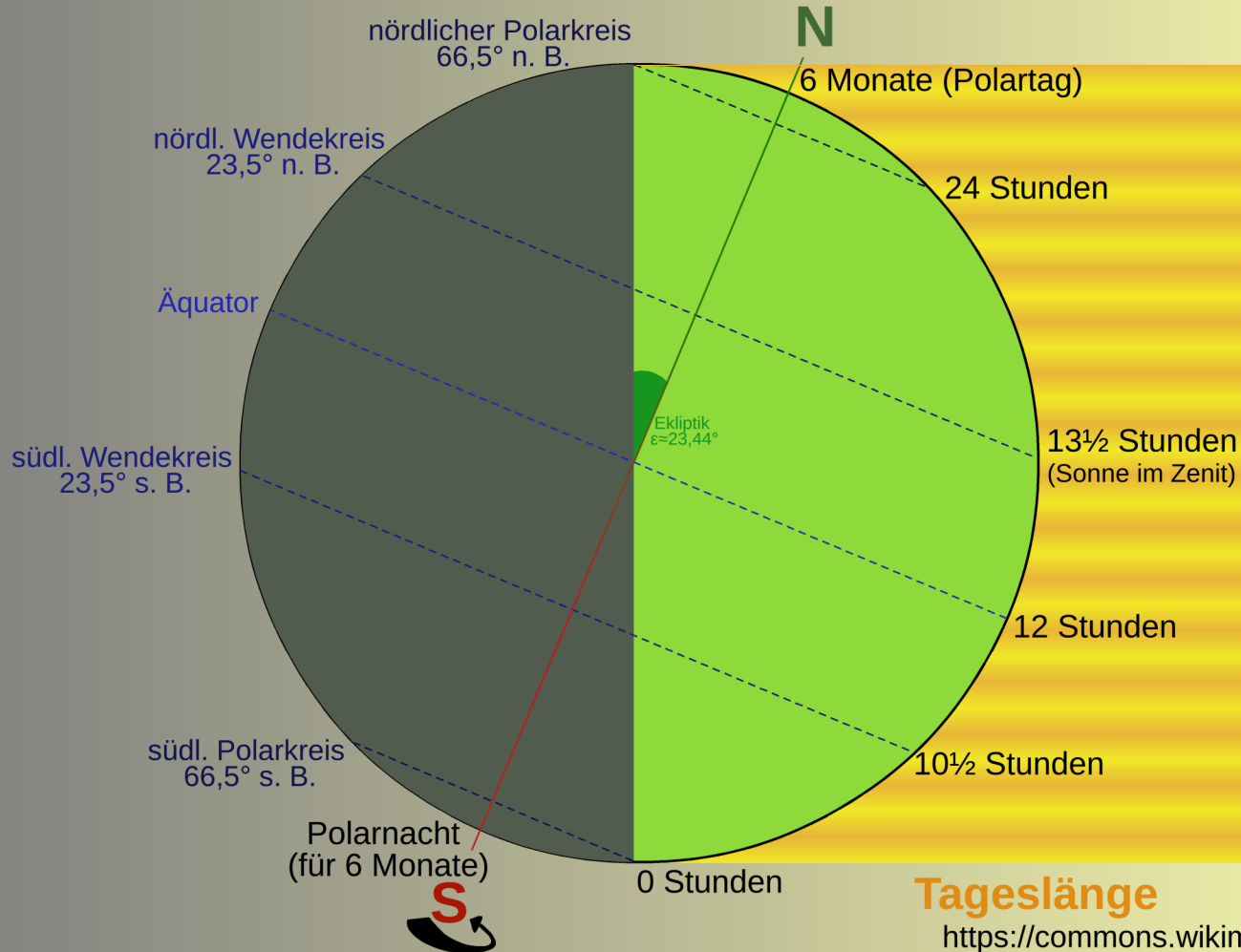






Tageslänge

Beleuchtung der Erde am 21. Juni



Tageslänge

<https://commons.wikimedia.org/wiki/File:Tageslaenge.svg>

Bekanntmachung.

Zufolge des Reichsgesetzes vom 12. d. M. ist vom 1. April d. J. ab die **gesetzliche** Zeit in Deutschland die mittlere Sonnenzeit des fünfzehnten Längengrades östlich von Greenwich.

Für Uetersen wird danach von dem Zeitpunkte ab gegenüber der jetzt gebräuchlichen Zeitbestimmung die **Uhrzeit um etwa 21 Minuten vorzurücken sein.**

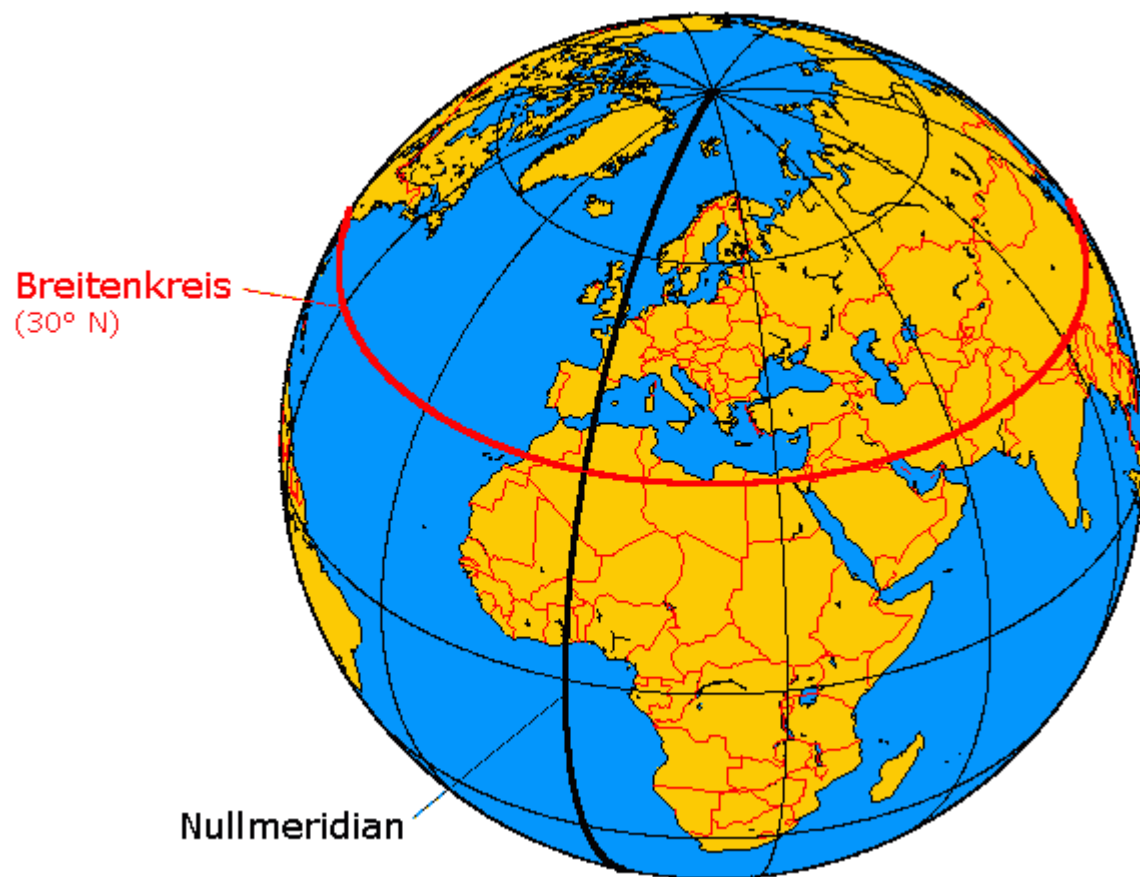
Die neue Uhrzeit ist dann auf allen Eisenbahnstationen und Telegraphenanstalten zuverlässig zu ersehen.

Wegen der eintretenden Veränderung in den öffentlichen und Verkehrsverhältnissen ersuche ich die Einwohnerschaft und insbesondere die industriellen Unternehmer ihre Uhren richtig zu stellen, indem ich bemerke, daß ich den Klosterchorchorstand ersucht habe, mit dem 1. April d. J. die Kirchenuhr nach der neuen Zeitbestimmung zu richten.

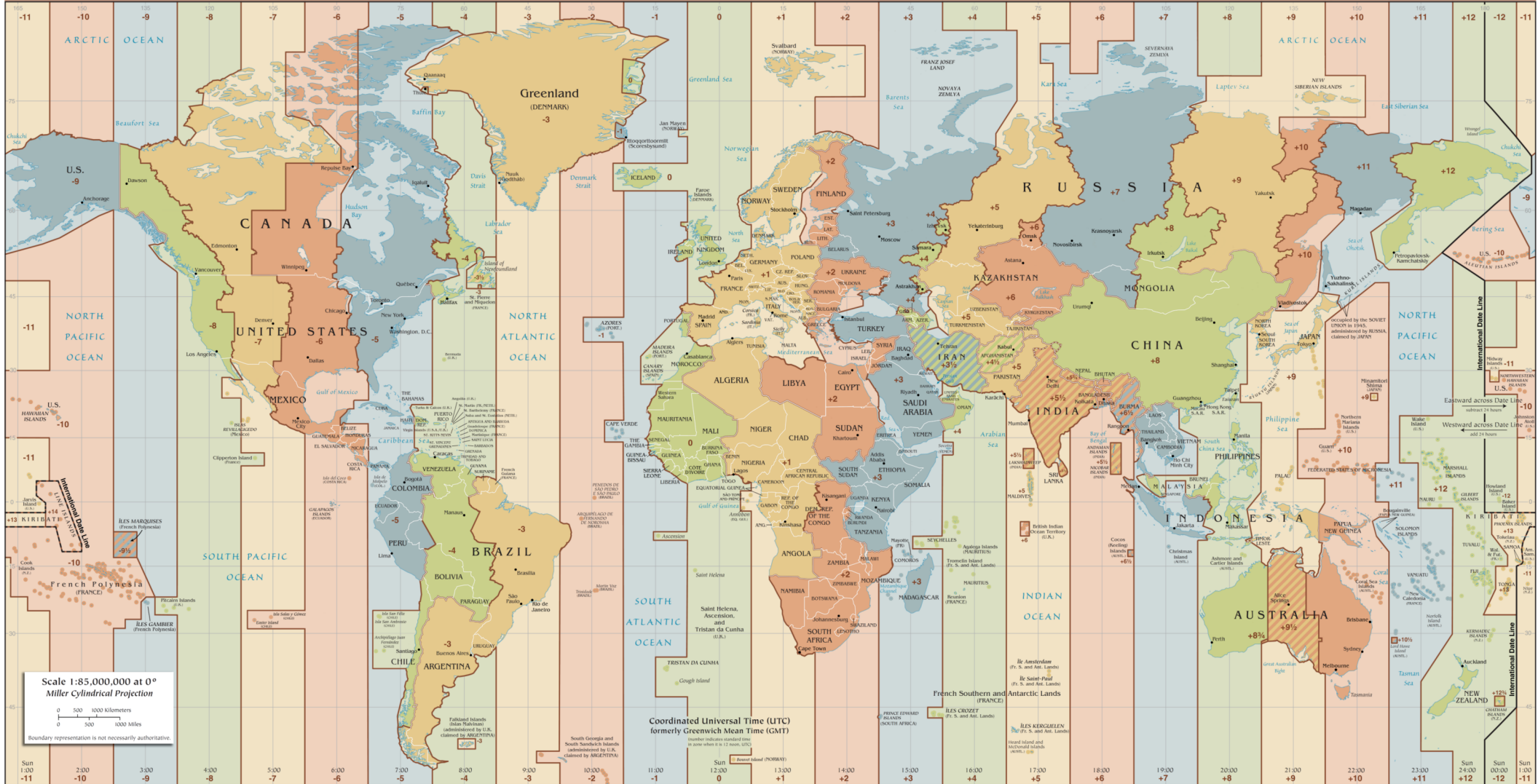
Auch für den Schulbeginn wird die neue Zeit durchaus maßgebend sein.

Uetersen, den 27. März 1893.

Der Bürgermeister.



STANDARD TIME ZONES OF THE WORLD





~~02/01/13 02:53:34 PM JST~~

2013-02-01T14:52:34+09:00

Time Zone Database (tz)

- BCP: 175 / Request for Comments: 6557
- Verwaltet durch die IANA (Internet Assigned Numbers Authority)
- <https://www.iana.org/time-zones>

Country Codes - ISO 3166

- ISO 3166-1 Country codes
 - ISO 3166-1 alpha-2 – two-letter country codes
 - ISO 3166-1 alpha-3 – three-letter country codes
 - ISO 3166-1 numeric – three-digit country codes
- ISO 3166-2 Country subdivision code
- ISO 3166-3 Code for formerly used names of countries

ISO 8601:2004

[Preview](#)

Data elements and interchange formats -- Information interchange -- Representation of dates and times

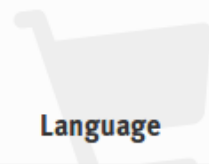
ISO 8601:2004 is applicable whenever representation of dates in the Gregorian calendar, times in the 24-hour timekeeping system, time intervals and recurring time intervals or of the formats of these representations are included in information interchange. It includes

- calendar dates expressed in terms of calendar year, calendar month and calendar day of the month;
- ordinal dates expressed in terms of calendar year and calendar day of the year;
- week dates expressed in terms of calendar year, calendar week number and calendar day of the week;
- local time based upon the 24-hour timekeeping system;
- Coordinated Universal Time of day;
- local time and the difference from Coordinated Universal Time;
- combination of date and time of day;
- time intervals;
- recurring time intervals.

ISO 8601:2004 does not cover dates and times where words are used in the representation and dates and times where characters are not used in the representation.

ISO 8601:2004 does not assign any particular meaning or interpretation to any data element that uses representations in accordance with ISO 8601:2004. Such meaning will be

Buy this standard



Format

Language



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DRAFT INTERNATIONAL STANDARD

ISO/DIS 8601-1

ISO/TC 154

Secretariat: SAC

Voting begins on:
2016-12-30

Voting terminates on:
2017-03-23

Data elements and interchange formats — Information interchange — Representation of dates and times —

Part 1: Basic rules

Éléments de données et formats d'échange — Échange d'information — Représentation de la date et de l'heure —

Partie 1: Règles de base

LC_TIME=en_DK.UTF-8

- CLDR - Unicode Common Locale Data Repository
 - <http://cldr.unicode.org/>
- ICU - International Components for Unicode C Library
 - <http://site.icu-project.org/>
- Closure Javascript Library
 - <https://developers.google.com/closure/library/>

DIN 5008

- Schreib- und Gestaltungsregeln für die Textverarbeitung
- Die Festlegungen und Empfehlungen für die PC-Textverarbeitung und das Maschinenschreiben legen Satzzeichen, Schriftzeichen für Wörter, Rechenzeichen, Formeln, Zahlengliederungen, Tabellen sowie die Gliederung von Texten fest, um eine Anleitung zu geben, Schriftstücke zweckmäßig und übersichtlich zu gestalten.
- Berücksichtigte die Norm zunächst ausnahmslos Schreibmaschinen, werden seit der Neufassung vom Mai 1996 auch PC-Textverarbeitungsprogramme beachtet.

Internationale Rufnummern

Schreibweise	Bemerkungen
+49 30 12345-67	DIN 5008
+49 30 1234567	E.123
+49 (30) 12345 - 67	Microsoft
tel:+49-30-1234567	URI nach RFC 3966
+49 (0)30 12345-67	Nicht standardkonform. MUST DIE !!!

Nationale Rufnummern

Schreibweise	Bemerkungen
030 12345-67	DIN 5008
(030) 12345 67	E.123
0900 5 123456	DIN 5008 Mehrwertdienste
0 30 / 12 34 56	Nicht standardkonform. MUST DIE !!!

URI nach RFC 3966

Network Working Group
Request for Comments: 3986
STD: 66
Updates: [1738](#)
Obsoletes: [2732](#), [2396](#), [1808](#)
Category: Standards Track

T. Berners-Lee
W3C/MIT
R. Fielding
Day Software
L. Masinter
Adobe Systems
January 2005

Uniform Resource Identifier (URI): Generic Syntax

Status of This Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

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- `ftp://ftp.is.co.za/rfc/rfc1808.txt`
- `http://www.ietf.org/rfc/rfc2396.txt`
- `ldap://[2001:db8::7]/c=GB?objectClass?one`
- `mailto:John.Doe@example.com`
- `news:comp.infosystems.www.servers.unix`
- `tel:+1-816-555-1212`
- `telnet://192.0.2.16:80/`
- `urn:oasis:names:specification:docbook:dtd:xml:4.1.`

RFCs

- Requests for Comments / Bitte um Kommentare
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- Internetstandard: Ein oder mehrere RFCs
- <https://www.rfc-editor.org/>



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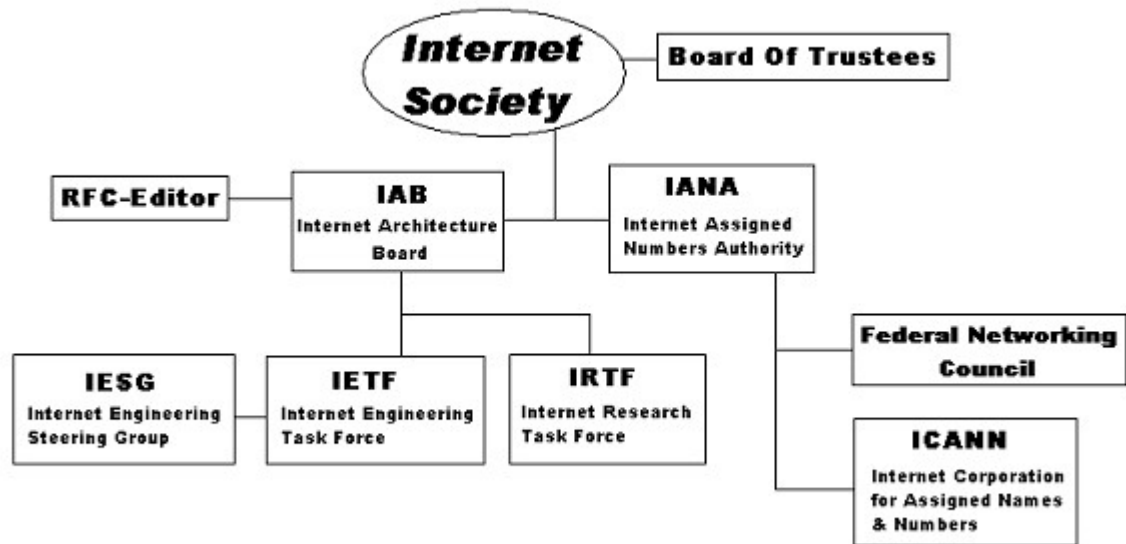
rfc-interest@rfc-editor.org

- for general community discussion about the RFC series and the RFC Editor functions. The Information page is [here](#).

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webmaster@rfc-editor.org

- to report technical problems (e.g., problems related to servers, mailing lists, archives, web tools, etc.) or



RFC-Status

- Informational
- Experimental
- Proposed Standard
- Draft Standard
- Standard
- Historic
- Required
- Recommended/Suggested
- Elective

RFC 2119 - Key words for use in RFCs to Indicate Requirement Levels

- 1. MUST This word, or the terms "REQUIRED" or "SHALL", mean that the definition is an absolute requirement of the specification.
- 2. MUST NOT - This phrase, or the phrase "SHALL NOT", mean that the definition is an absolute prohibition of the specification.
- 3. SHOULD - This word, or the adjective "RECOMMENDED", mean that there
 - may exist valid reasons in particular circumstances to ignore a
 - particular item, but the full implications must be understood and
 - carefully weighed before choosing a different course.
- 4. SHOULD NOT -This phrase, or the phrase "NOT RECOMMENDED" mean that
 - there may exist valid reasons in particular circumstances when the
 - particular behavior is acceptable or even useful, but the full
 - implications should be understood and the case carefully weighed
 - before implementing any behavior described with this label.
- 5. MAY - This word, or the adjective "OPTIONAL", mean that an item is truly optional.

STD 68 / RFC 5234: Augmented Backus-Naur Form for Syntax Specifications

```
date-time      = [ day-of-week "," ] date time [CFWS]
day-of-week    = ([FWS] day-name) / obs-day-of-week
day-name       = "Mon" / "Tue" / "Wed" / "Thu" / "Fri" / "Sat" / "Sun"
date           = day month year
day            = ([FWS] 1*2DIGIT FWS) / obs-day
month          = "Jan" / "Feb" / "Mar" / "Apr" / "May" / "Jun" / "Jul" /
"Aug" / "Sep" / "Oct" / "Nov" / "Dec"
year           = (FWS 4*DIGIT FWS) / obs-year
time           = time-of-day zone
time-of-day    = hour ":" minute [ ":" second ]
hour           = 2DIGIT / obs-hour
minute         = 2DIGIT / obs-minute
second        = 2DIGIT / obs-second
zone           = (FWS ( "+" / "-" ) 4DIGIT) / obs-zone
```


Fully RFC-822-compliant regex

```
(?:((?:\r\n)?[ \t])*(?:((?:((?:^[()<>@,;:\\".\[\] \000-\031]+(?:((?:\r\n)?[ \t])  
)+|\Z|(?=[\"()<>@,;:\\".\[\])))|"(?:^[\\r\\]|\\.|(?:((?:\r\n)?[ \t]))*"((?:\r\n)?[ \t])*)  
(?:\.((?:((?:\r\n)?[ \t])*(?:^[()<>@,;:\\".\[\] \000-\031]+(?:((?:\r\n)?[ \t])  
?:\r\n)?[ \t])+\Z|(?=[\"()<>@,;:\\".\[\])))|"(?:^[\\r\\]|\\.|(?:((?:\r\n)?[ \t]))*"((?:\r\n)?[ \t])*)  
)*)*@(?:((?:\r\n)?[ \t])*(?:^[()<>@,;:\\".\[\] \000-\0  
31]+(?:((?:\r\n)?[ \t])+\Z|(?=[\"()<>@,;:\\".\[\])))|([^\[\]\r\\]|\\.)*\  
)((?:((?:\r\n)?[ \t])*(?:\.((?:((?:\r\n)?[ \t])*(?:^[()<>@,;:\\".\[\] \000-\031]+  
(?:((?:\r\n)?[ \t])+\Z|(?=[\"()<>@,;:\\".\[\])))|([^\[\]\r\\]|\\.)*\|  
(?:((?:\r\n)?[ \t])*)*)|(?^[()<>@,;:\\".\[\] \000-\031]+(?:((?:\r\n)?[ \t])+\Z
```

Fully RFC-822-compliant regex

|(?=[^"()<>@,;:\\".\\[\\]))|"(?:[^\\"\\r\\n]|\\.|(?:(?:\\r\\n)?[\\t]))*"(?:(?:\\r\\n)?[\\t])*)*\\<(?:(?:\\r\\n)?[\\t])*(?:@(?:[^()<>@,;:\\".\\[\\] \\000-\\031]+(?:?:(?:\\r\\n)?[\\t])+|\\Z|(?=[^"()<>@,;:\\".\\[\\]))|\\([\\^\\[\\]\\\\r\\\\n|\\\\.)*\\)(?:(?:\\r\\n)?[\\t])*)?(?:\\.?(?:(?:\\r\\n)?[\\t])*(?:[^()<>@,;:\\".\\[\\] \\000-\\031]+(?:?:(?:\\r\\n)?[\\t])+|\\Z|(?=[^"()<>@,;:\\".\\[\\]))|\\([\\^\\[\\]\\\\r\\\\n|\\\\.)*\\)(?:(?:\\r\\n)?[\\t])*)*)*(?:,|@(?:(?:\\r\\n)?[\\t])*(?:[^()<>@,;:\\".\\[\\] \\000-\\031]+(?:?:(?:\\r\\n)?[\\t])+|\\Z|(?=[^"()<>@,;:\\".\\[\\]))|\\([\\^\\[\\]\\\\r\\\\n|\\\\.)*\\)(?:(?:\\r\\n)?[\\t])*)*(?:\\r\\n)?[\\t])+|\\Z|(?=[^"()<>@,;:\\".\\[\\]))|\\([\\^\\[\\]\\\\r\\\\n|\\\\.)*\\)(?:(?:\\r\\n)?[\\t])*)*(?:\\.?(?:(?:\\r\\n)?[\\t])*(?:[^()<>@,;:\\".\\[\\] \\000-\\031]+(?:?:(?:\\r\\n)?[\\t])+|\\Z|(?=[^"()<>@,;:\\".\\[\\]))|\\([\\^\\[\\]\\\\r\\\\n|\\\\.)*\\)(?:(?:\\r\\n)?[\\t])*)*)

Fully RFC-822-compliant regex

```
)+|Z|(?=[\"()<>@,;:\\\".\\[\\]])|\\([\\^\\[\\r\\]|\\.)*\\(?:\\(?:\\r\\n)?[ \\t])*)*)
*:\\(?:\\(?:\\r\\n)?[ \\t])*)\\(?:\\[\"()<>@,;:\\\".\\[\\] \\000-\\031]+(?:\\(?:\\(?:\\r\\n)?[ \\t])+
|Z|(?=[\"()<>@,;:\\\".\\[\\])))|\"(?:\\[\\^\\[\\r\\]|\\.|(?:\\(?:\\r\\n)?[ \\t]))*\"(?:\\(?:\\r
\\n)?[ \\t])*)(?:\\.\\(?:\\(?:\\r\\n)?[ \\t])*(?:\\[\"()<>@,;:\\\".\\[\\] \\000-\\031]+(?:\\(?:\\(?:\\r
\\r\\n)?[ \\t])+|Z|(?=[\"()<>@,;:\\\".\\[\\])))|\"(?:\\[\\^\\[\\r\\]|\\.|(?:\\(?:\\r\\n)?[ \\t
]))*\"(?:\\(?:\\r\\n)?[ \\t])*)*@(?:\\(?:\\r\\n)?[ \\t])*(?:\\[\"()<>@,;:\\\".\\[\\] \\000-\\031
]+(?:\\(?:\\(?:\\r\\n)?[ \\t])+|Z|(?=[\"()<>@,;:\\\".\\[\\])))|\\([\\^\\[\\r\\]|\\.)*\\(
?:\\(?:\\r\\n)?[ \\t])*)(?:\\.\\(?:\\(?:\\r\\n)?[ \\t])*(?:\\[\"()<>@,;:\\\".\\[\\] \\000-\\031]+(?:
?:\\(?:\\r\\n)?[ \\t])+|Z|(?=[\"()<>@,;:\\\".\\[\\])))|\\([\\^\\[\\r\\]|\\.)*\\(?:\\(?:
```

Fully RFC-822-compliant regex

```
:\\r\\n)?[ \\t])*)*)\\>((?:\\(?:\\r\\n)?[ \\t])*)|(?:[^()<>@,;:\\\".\\[\\] \\000-\\031]+(?:\\(?:\\r\\n)?[ \\t])+(?:\\(?:\\r\\n)?[ \\t])+|\\Z|(?=\\[\"()<>@,;:\\\".\\[\\]))|\"(?:\\(?:\\r\\n)?[ \\t])+(?:\\(?:\\r\\n)?[ \\t]))*\"(?:\\(?:\\r\\n)?[ \\t])*)*:(?:\\(?:\\r\\n)?[ \\t])*(?:\\(?:\\(?:\\(?:\\(?:\\(?:\\(?:\\r\\n)?[ \\t])+(?:\\(?:\\(?:\\(?:\\r\\n)?[ \\t])+(\\Z|(?=\\[\"()<>@,;:\\\".\\[\\]))|\"(?:\\(?:\\r\\n)?[ \\t])+(?:\\(?:\\r\\n)?[ \\t]))*\"(?:\\(?:\\r\\n)?[ \\t])*)\\(?:\\.\\(?:\\(?:\\r\\n)?[ \\t])*(?:\\(?:\\(?:\\r\\n)?[ \\t])+(?:\\(?:\\(?:\\r\\n)?[ \\t])+(\\Z|(?=\\[\"()<>@,;:\\\".\\[\\] \\000-\\031]+(?:\\(?:\\r\\n)?[ \\t])+(\\Z|(?=\\[\"()<>@,;:\\\".\\[\\] \\000-\\031]+(?:\\(?:\\r\\n)?[ \\t])+(\\Z|(?=\\[\"()<>@,;:\\\".\\[\\] \\000-\\031]+(?:\\(?:\\r\\n)?[ \\t])+(\\Z|(?=\\[\"()<>@,;:\\\".\\[\\] \\000-\\031]+(?:\\(?:\\r\\n)?[ \\t])+(\\Z|(?=\\[\"()<>@,;:\\\".\\[\\] \\000-\\031)+
```

Fully RFC-822-compliant regex

```
".\[\]]))|\[([^\[\]\r\\]|\\.)*\](?:(?!\r\n)?[ \t])*(?:(?!\r\n)?[ \t])*(?  
:[^()<>@,;\\\".\[\] \000-\031]+(?:(?:(?!\\r\\n)?[ \t])+\|Z|(?=[\"()<>@,;\\\".\[  
\\]))|\[([^\[\]\r\\]|\\.)*\](?:(?!\r\n)?[ \t])*)|(?:[^()<>@,;\\\".\[\] \000-  
\031]+(?:(?:(?!\\r\\n)?[ \t])+\|Z|(?=[\"()<>@,;\\\".\[\]]))|\"(?:[^\\"r\\]|\\.|(  
?:(?!\r\n)?[ \t]))*\"(?:?(?!\\r\n)?[ \t])*)*\\<(?!\\r\n)?[ \t])*(?:@(?:[^\"]<>@,;  
:\\\".\[\] \000-\031]+(?:(?:(?!\\r\\n)?[ \t])+\|Z|(?=[\"()<>@,;\\\".\[\]]))|\[([  
^\[\]\r\\]|\\.)*\](?:(?!\r\n)?[ \t])*(?:\\.?(?:(?!\\r\\n)?[ \t])*(?:[^\"]<>@,;:\\\"  
.\[\] \000-\031]+(?:(?:(?!\\r\\n)?[ \t])+\|Z|(?=[\"()<>@,;\\\".\[\]]))|\[([^\[
```

Fully RFC-822-compliant regex

```
]\r\\|\\.)*\](?:(?:\r\n)?[ \t])*)*(?:.,@(?:(?:\r\n)?[ \t])*(?:[^\(\)<>@,;\\\".\\[\\  
\] \000-\031]+(?:(?:\r\n)?[ \t])+|Z|(?=[\["()<>@,;\\\".\\[\\]]))|\\([^\[\]\\\r\\  
r\\|\\.)*\](?:(?:\r\n)?[ \t])*(?:\\. (?:(?:\r\n)?[ \t])*(?:[^\(\)<>@,;\\\".\\[\\]  
\000-\031]+(?:(?:\r\n)?[ \t])+|Z|(?=[\["()<>@,;\\\".\\[\\]]))|\\([^\[\]\\\r\\|\\  
\\.)*\](?:(?:\r\n)?[ \t])*)*)*(?:\r\n)?[ \t])*(?:[^\(\)<>@,;\\\".\\[\\] \0  
00-\031]+(?:(?:\r\n)?[ \t])+|Z|(?=[\["()<>@,;\\\".\\[\\]]))|\"(?:[^\\"\\\r\\|\\  
\\.](?:(?:\r\n)?[ \t]))*\"(?:(?:\r\n)?[ \t])*(?:[^\(\)<>@,  
;\\\".\\[\\] \000-\031]+(?:(?:\r\n)?[ \t])+|Z|(?=[\["()<>@,;\\\".\\[\\]]))|\"(?  
:[^\\"\\\r\\|\\\\.](?:(?:\r\n)?[ \t]))*\"(?:(?:\r\n)?[ \t])*)*@(?:\r\n)?[ \t])*
```

Fully RFC-822-compliant regex

```
(?:[^\s@<=>@,;:\\".\[\] \000-\031]+(?::(?:\r\n)?[ \t]))+|Z|(?=[\s@<=>@,;:\\".]
```

\\[\\]))|\\([\\^\\[\\]\\\\r\\\\\\\\|\\\\\\\\.)*\\](?:(?:\\\\r\\\\n)?[\\\\t])*(?:\\. (?: (?:\\\\r\\\\n)?[\\\\t])*(?:[
^())<>@,;:\\\\\".\\[\\] \\\\000-\\\\031]+(?: (?: (?:\\\\r\\\\n)?[\\\\t])+)\\\\Z|(?:=\\[\\\"())<>@,;:\\\\\".\\[
\\[

```
]))|([^\[\]\r\\|\\.)*\](?:(?:\r\n)?[ \t])*)*\>(?:(?:\r\n)?[ \t])*(?:,\s*(?:
(?:\^[()<>@,;:\\".\[\] \000-\031]+(?:\:(?:\r\n)?[ \t])+\|Z|(?=\[
["()<>@,;:\\".
```

```
"\.[\]]))|"(?:[^\\"r\\]|\\.|(?:(?:\r\n)?[ \t]))*"(?::(?:\r\n)?[ \t])*(?:\.|(?:(?:\r\n)?[ \t])*(?:\r\n)?[ \t])*(?:[^\(\)<>@,;\\".\[\] \000-\031])+(?::(?:\r\n)?[ \t])+|\Z|(?
```


Fully RFC-822-compliant regex

```
=[  
\\["()<>@,;:\\".\\[\\]])|"(?:[^"\\\r\\]|\\.|(?:(?:\\r\\n)?[ \\t]))*"(?:(?:\\r\\n)?[ \\t  
])*))*@(?:(?:\\r\\n)?[ \\t])*(?:[^()<>@,;:\\".\\[\\] \\\\000-\\\\031]+(?:(?:\\r\\n)?  
[ \\t  
])+|\\Z|(?:\\["()<>@,;:\\".\\[\\]])|\\[(\\[^\\]\\\r\\]|\\.)*\\](?:(?:\\r\\n)?[ \\t])*(?  
:\\.(?:(?:\\r\\n)?[ \\t])*(?:[^()<>@,;:\\".\\[\\] \\\\000-\\\\031]+(?:(?:\\r\\n)?[ \\t])+|  
\\Z|(?:\\["()<>@,;:\\".\\[\\]])|\\[(\\[^\\]\\\r\\]|\\.)*\\](?:(?:\\r\\n)?[ \\t])*)*)|(?:  
[^()<>@,;:\\".\\[\\] \\\\000-\\\\031]+(?:(?:\\r\\n)?[ \\t])+|\\Z|(?:\\["()<>@,;:\\".\\[  
\\  
\\]])|"(?:[^"\\\r\\]|\\.|(?:(?:\\r\\n)?[ \\t]))*"(?:(?:\\r\\n)?[ \\t])*)*\\<(?:(?:\\r\\n)
```

Fully RFC-822-compliant regex

?[\t)]*(?:@(?:[^()<>@,;\\".\[\] \000-\031]+(?::(?:\r\n)?[\t])+|Z|(?=[

)<>@,;\\".\[\]))|([^\[\r\\]|\\.)*\|(?:\r\n)?[\t)]*(?:\.(?:\r\n)?

?[\t)]*(?:[^()<>@,;\\".\[\] \000-\031]+(?::(?:\r\n)?[\t])+|Z|(?=[

@,;\\".\[\]))|([^\[\r\\]|\\.)*\|(?:\r\n)?[\t)]*(?:,|@(?:\r\n)?[\t)]*(?:[^()<>@,;\\".\[\] \000-\031]+(?::(?:\r\n)?[\t])+|Z|(?=[

;\\".\[\]))|([^\[\r\\]|\\.)*\|(?:\r\n)?[\t)]*(?:\.(?:\r\n)?[\t]

)*(?:[^()<>@,;\\".\[\] \000-\031]+(?::(?:\r\n)?[\t])+|Z|(?=[

Fully RFC-822-compliant regex

```
["()<>@,;:\\"
".\[\]]))|\\([^\[\]\\\r\\]|\\.)*\\(?:\\(?:\\r\\n)?[ \\t])*)*)*:(?:\\(?:\\(?:\\r\\n)?[ \\t])*)?
(?:\\(?:^()<>@,;:\\".\[\] \000-\031]+(?:\\(?:\\(?:\\r\\n)?[ \\t])+|Z|(?=[\\"
["()<>@,;:\\".
\[\]]))|"(?:\\(?:^\\r\\]|\\.|\\(?:\\(?:\\r\\n)?[ \\t]))*"\\(?:\\(?:\\r\\n)?[ \\t])*(?:\\.\\(?:\\(?:\\r\\n)?[ \\t])*(?:\\(?:^()<>@,;:\\".\[\] \000-\031]+(?:\\(?:\\(?:\\r\\n)?[ \\t])+|Z|(?=[\\"
")<>@,;:\\".\[\]))|"(?:\\(?:^\\r\\]|\\.|\\(?:\\(?:\\r\\n)?[ \\t]))*"\\(?:\\(?:\\r\\n)?[ \\t])
*)*@(?:\\(?:\\r\\n)?[ \\t])*(?:\\(?:^()<>@,;:\\".\[\] \000-\031]+(?:\\(?:\\(?:\\r\\n)?[ \\t])
+|Z|(?=[["()<>@,;:\\".\[\]]))|\\([^\[\]\\\r\\]|\\.)*\\(?:\\(?:\\r\\n)?[ \\t])*(?:\\
```

Fully RFC-822-compliant regex

```
.(?:(?:\r\n)?[ \t])*(?:[^\()<>@,;:\\".\[\] \000-\031]+(?:\:(?:\:(?:\r\n)?[ \t])+|\Z  
|(?=[\["()<>@,;:\\".\[\]])|\\([^\[\]\r\\]|\\.))*\|(?:(?:\r\n)?[ \t])*)*\|>(?:(  
?:\r\n)?[ \t])*)*)?;\s*)
```

<http://ex-parrot.com/~pdw/Mail-RFC822-Address.html>

Ausgewählte RFCs

- RFC 1 (erste RFC von Steve Crocker)
- RFC 768 (UDP)
- RFC 791 (IP)
- RFC 792 (ICMP)
- RFC 793 (TCP)
- RFC 821 (SMTP)
- RFC 822 (E-Mail-Format)
- RFC 1034 (DNS – Concepts and Facilities)
- RFC 1035 (DNS – Implementation and Specification)
- RFC 1087 (Ethics and the Internet)
- RFC 1738 (URLs)
- RFC 2131 (DHCP)
- RFC 2440 (OpenPGP)
- RFC 2460 (IPv6)
- RFC 2606 (Zu Testzwecken reservierte Top-Level-Domains)
- RFC 3174 (SHA)
- RFC 3501 (IMAP Version 4 Protocol Specification)
- RFC 3920 (XMPP Core, sowie in RFC 3921 IM & Presence)
- RFC 3986 (URIs)
- RFC 4511 (LDAP)
- RFC 5545 (iCalendar)
- RFC 7230 (HTTP 1.1)

RFC 8252: OAuth 2.0 for Native Apps

Internet Engineering Task Force (IETF)
Request for Comments: 8252
BCP: 212
Updates: 6749
Category: Best Current Practice
ISSN: 2070-1721

W. Denniss
Google
J. Bradley
Ping Identity
October 2017

OAuth 2.0 for Native Apps

Abstract

OAuth 2.0 authorization requests from native apps should only be made through external user-agents, primarily the user's browser. This specification details the security and usability reasons why this is the case and how native apps and authorization servers can implement this best practice.

Status of This Memo

This memo documents an Internet Best Current Practice.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has

Updated by: [2549](#), [6214](#)

EXPERIMENTAL

Errata Exist

Network Working Group

D. Waitzman

Request for Comments: 1149

BBN STC

1 April 1990

A Standard for the Transmission of IP Datagrams on Avian Carriers

Status of this Memo

This memo describes an experimental method for the encapsulation of IP datagrams in avian carriers. This specification is primarily useful in Metropolitan Area Networks. This is an experimental, not recommended standard. Distribution of this memo is unlimited.

Network Working Group
Request for Comments: 2549
Updates: [1149](#)
Category: Experimental

D. Waitzman
IronBridge Networks
1 April 1999

IP over Avian Carriers with Quality of Service

Status of this Memo

This memo defines an Experimental Protocol for the Internet community. It does not specify an Internet standard of any kind. Discussion and suggestions for improvement are requested. Distribution of this memo is unlimited.

RFC 4180: Common Format and MIME Type for Comma-Separated Values (CSV) Files

- MS-DOS-style lines that end with (CR/LF) characters (optional for the last line).
- An optional header record (there is no sure way to detect whether it is present, so care is required when importing).
- Each record "should" contain the same number of comma-separated fields.
- Any field may be quoted (with double quotes).
- Fields containing a line-break, double-quote or commas should be quoted.
- A (double) quote character in a field must be represented by two (double) quote characters.

RFC konformes CSV

Stunde, Montag, Dienstag, Mittwoch, Donnerstag, Freitag

1, Mathematik, Deutsch, Englisch, Mathematik, Kunst

2, Sport, Französisch, Geschichte, Sport, Geschichte

3, Sport, "Religion (ev, kath)", Kunst, , Kunst

MS Excel lesbares CSV

"sep=, "

Stunde, Montag, Dienstag, Mittwoch, Donnerstag, Freitag

1, Mathematik, Deutsch, Englisch, Mathematik, Kunst

2, Sport, Französisch, Geschichte, Sport, Geschichte

3, Sport, "Religion (ev, kath)", Kunst, , Kunst

ECMA-404: JSON DATA Interchange Syntax

Standard ECMA-404

2nd Edition / December 2017

**The JSON Data
Interchange Syntax**

JSONx

- JSONx is an IBM standard format to represent JSON as XML
- https://www.ibm.com/support/knowledgecenter/SS9H2Y_7.1.0/com.ibm.dp.doc/json_jsonx.html

```
{  
  "name": "John Smith",  
  "address": {  
    "streetAddress": "21 2nd Street",  
    "city": "New York",  
    "state": "NY",  
    "postalCode": 10021,  
  },  
  "phoneNumbers": [  
    "212 555-1111",  
    "212 555-2222"  
  ],  
  "additionalInfo": null,  
  "remote": false,  
  "height": 62.4,  
  "ficoScore": " > 640"  
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<json:object xsi:schemaLocation="http://www.datapower.com/schemas/json
jsonx.xsd"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:json="http://www.ibm.com/xmlns/prod/2009/jsonx">
  <json:string name="name">John Smith</json:string>
  <json:object name="address">
    <json:string name="streetAddress">21 2nd Street</json:string>
    <json:string name="city">New York</json:string>
    <json:string name="state">NY</json:string>
    <json:number name="postalCode">10021</json:number>
  </json:object>
  <json:array name="phoneNumbers">
    <json:string>212 555-1111</json:string>
    <json:string>212 555-2222</json:string>
  </json:array>
  <json:null name="additionalInfo" />
  <json:boolean name="remote">false</json:boolean>
  <json:number name="height">62.4</json:number>
  <json:string name="ficoScore"> > 640</json:string>
</json:object>
```

SGML

- Standard Generalized Markup Language
- Genormte Verallgemeinerte Auszeichnungssprache
- ISO-Standard: ISO 8879:1986
- Europäischen Norm EN 28879
- <https://www.iso.org/standard/16387.html>

SGML Beispiel

```
<!DOCTYPE article PUBLIC "-//OASIS//DTD DocBook  
V3.1//EN">
```

```
<article>
```

```
    <sect1 id="introduction"><title>Hello world  
introduction</title>
```

```
    <para>
```

```
    Hello world!
```

```
    </para>
```

```
  </sect1>
```

```
</article>
```

Ecma International (Ecma)

- Standardisierung von C# und weiteren Bestandteilen der .NET Technologie von Microsoft
- Standardisierung von ECMAScript
- Standardisierung des 3D-Formats U3D.
- Standardisierung von Office Open XML im Rahmen des technischen Komitees 45 (TC45)

Office Open XML (OOXML)

- ECMA-376 Office Open XML File Formats
- ISO/IEC 29500 Information technology – Office Open XML formats
- untereinander nicht kompatibel
- Bildet die die Arbeitsweisen von Microsoft Office ab
- <http://www.ecma-international.org/publications/standards/Ecma-376.htm>



OpenDocument - ODF

- OASIS Open Document Format for Office Applications
- ISO/IEC 26300-1:2015
- <http://docs.oasis-open.org/office/v1.2/cs01/OpenDocument-v1.2-cs01.html>

Fragen, Anregungen?

Robustness Principle:

"Be liberal in what you
accept, and conservative in
what you send"

– John Postel in RFC761 „DoD standard
Transmission Control Protocol“, January 1980

- Martin Leyrer
- <https://martin.leyrer.priv.at>
- @leyrer on Twitter & mastodon