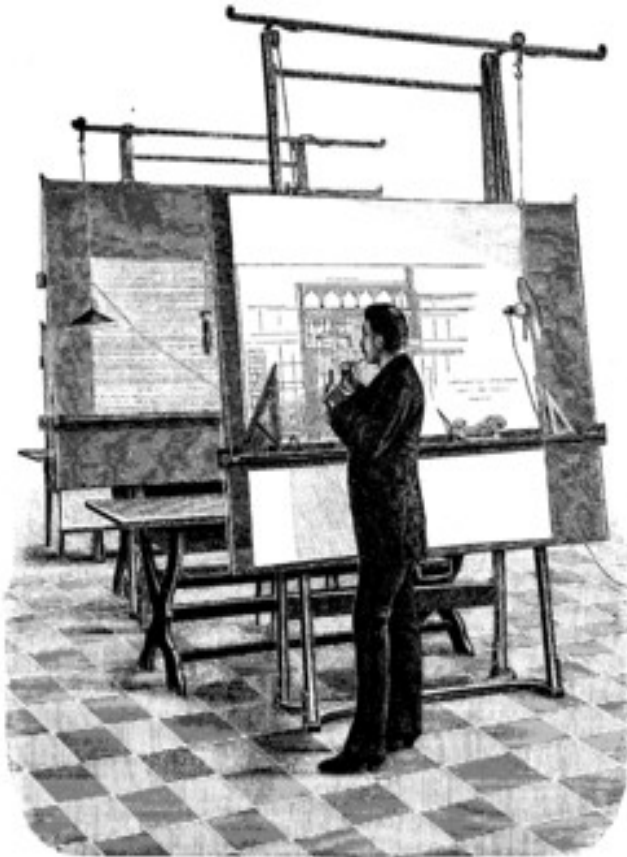


BIM und CDE - Das Herzstück!

Planung wie gehabt....



Architekt am Zeichenbrett

source: Wikipedia - public domain
runeberg.org/tekuke/1893/0161.html

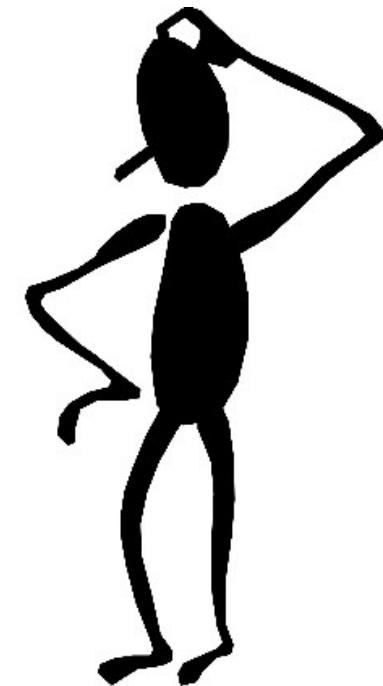
The Drawing Board

Graphical User
Interface

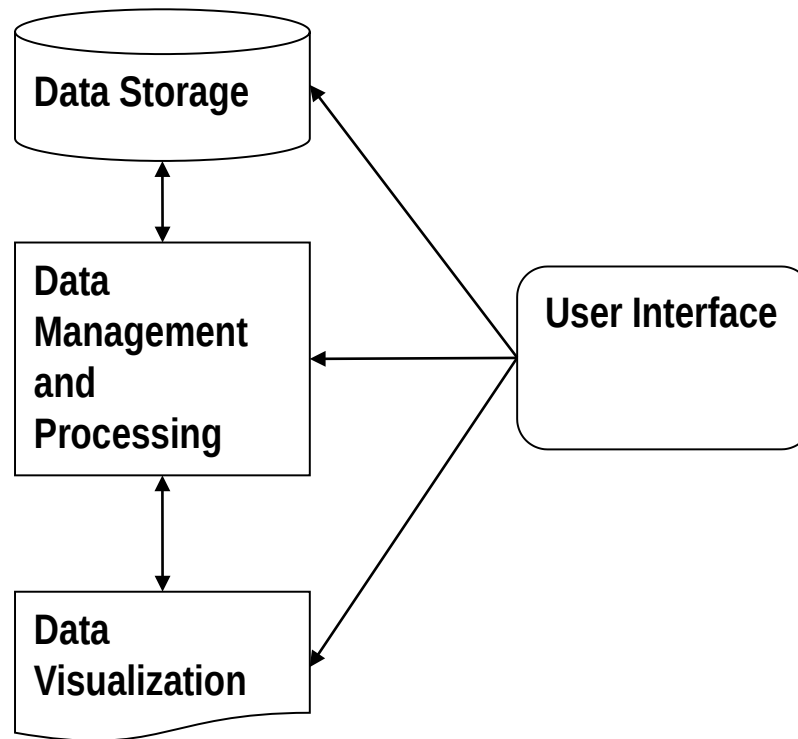
Data
Storage

Output

The Planer
(processor)



Informationsprozesse separieren – separat skalieren – skaliert anwenden



BIM Common Data Environment (CDE) - Basic Structure

The CDE contains

- **Webserver**



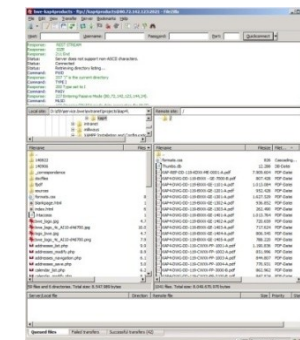
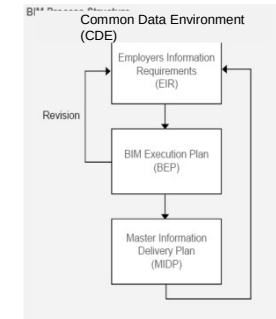
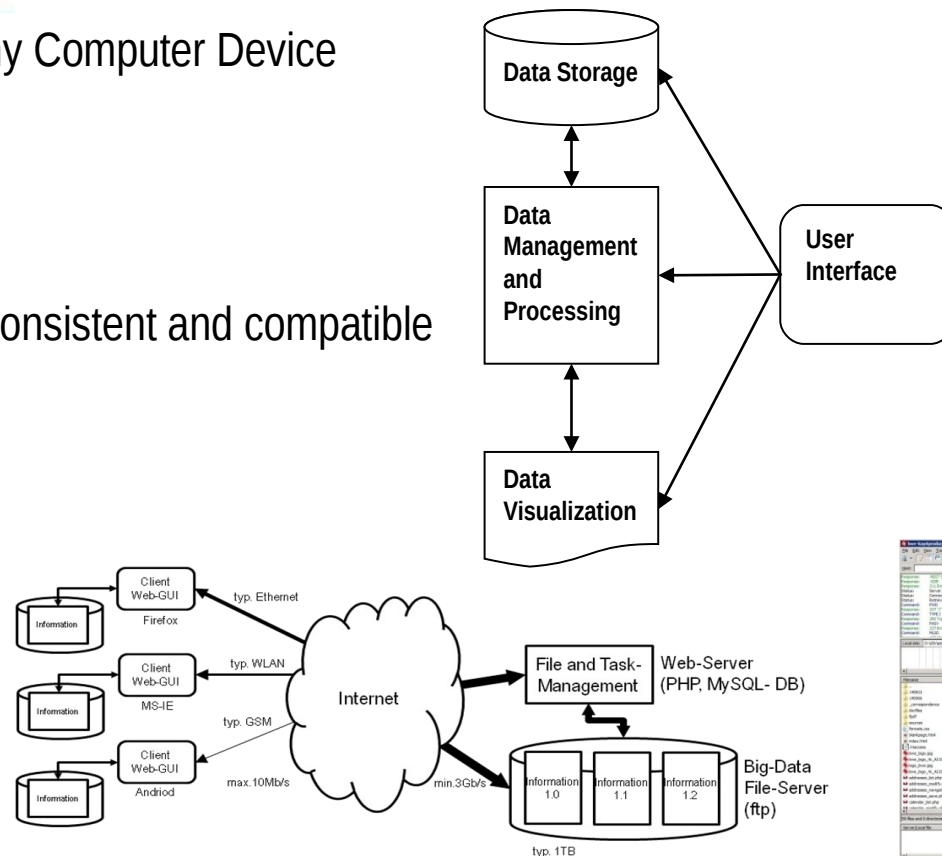
You can access the CDE from any Computer Device
(e.g. Smartfone....)

- **Database Server**

Your Data Management is safe, consistent and compatible
(MySQL DBMS)

- **ftp-Server**

You can back up ALL your data
at ANY time
with MINIMUM effort!



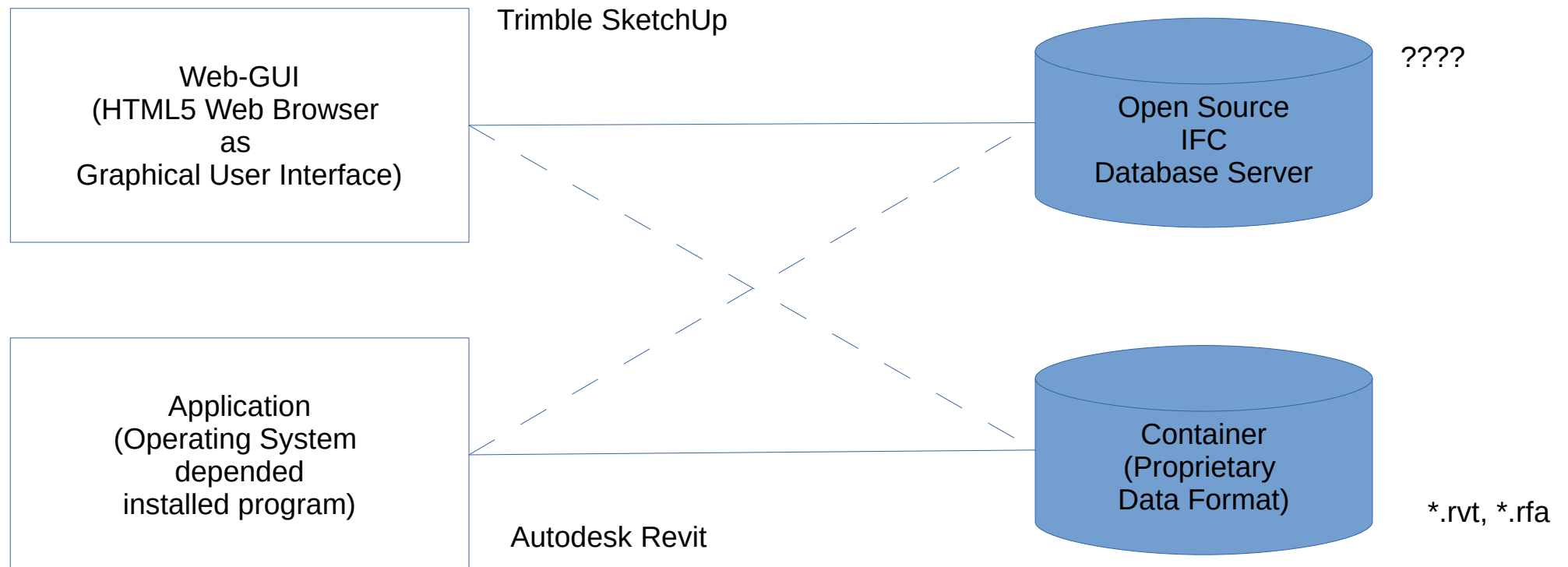
Konformitätskriterien für Technischen BIM Systeme

Konformitäts-Kriterium	Merkmal	Alternativen
Client – Server - Architektur	Zentrale Rechnerlast	Lokale Applikation
Online - System	jederzeit abrufbar	Offline
Web-GUI	betriebssystemunabhängig Offener Standard (HTML)	App Applikation
Datenbank -System	Skalierbar	Spreadsheet Zeichnung
Datenstruktur	Objektorientiert Vererbungshierarchie Methoden-Kapselung Instanzierung	SQL
Open Source (Copyleft)	Implementationskosten Entwicklungspotential	Proprietär

BIM Technischen BIM Systeme im Konformitätstest

BIM System (techn)	Konformitäts-Merkmal						Beispiel
	Client-Server	Online Ontime	Web-GUI	Data-Base	Object orient.	Copy-left	
Applikator				+	?		Autodesk Revit, Bentley Microstation, Nemetschek
Aggregator	+			+		?	ONUMA System
Coordinator	+	+		+			Oracle Primavera
Configurator	+	+	+	+	?	?	Fact TGA Anlagenkonfigurator
BIM Viewer proprietär	+	+		+	+		Solibri Model Checker
BIM Aggregator open source	+	+	+	+	+	+	Open BIMserver von Oracle, TNO, TU Eindhoven
BIM Editor open source	+	+	+	+	+	+	Open BIMeditor von ...

Das Dilemma bei den Werkzeugen



Die Entwicklung der Werkzeuge...

2002
Autodesk
kauft
Revit

2007
BS1192 –
Collaborative
Production of
Information

CAD, CAx ...

CDE !

CCE ?

1990

2010

2030

1990
AutoCAD
Release 11
Ausgabe nach
MS-Excel

2013
ISO 19650
Information
Management on
Assets -
Common Data
Environment

20xx
Common
Collaboration
Environment

“Information is Data placed into Context”

Mary Loomis in Schenck/Douglas “Information Modelling the EXPRESS Way” (1994)