



Uniface Lab Under the Hood

A tour through our Software Factory

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November 2014



UNIFACE



Software Factory

... a structured collection of related software assets that aids in producing computer software applications or software components according to specific, externally defined end-user requirements through an assembly process.

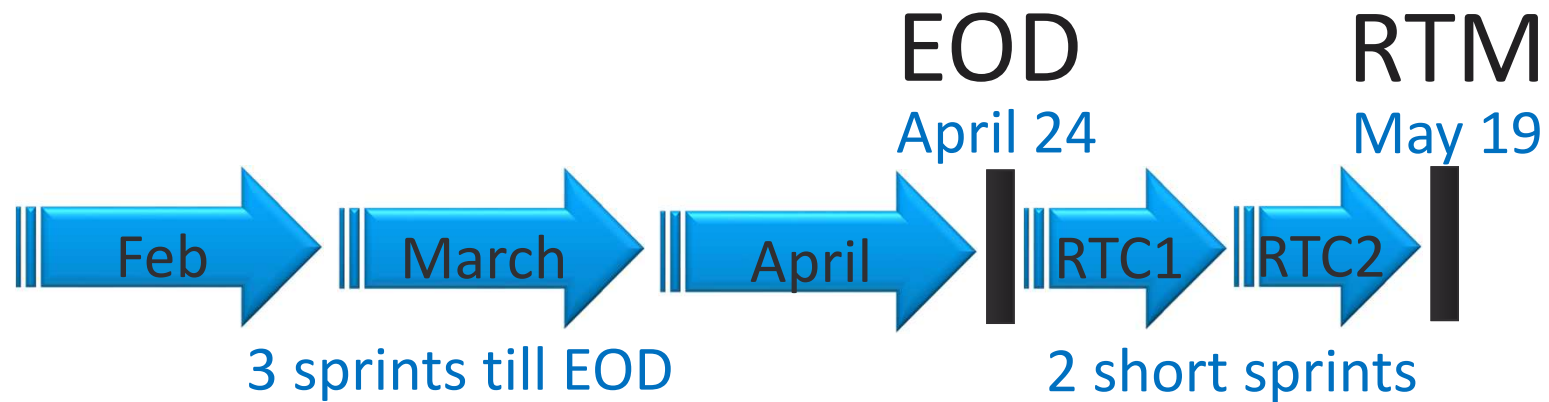
Source: Wikipedia

Uniface Lab Under the Hood

- ▲ Software Factory – from code to product
- ▲ Infrastructure
- ▲ Release process
- ▲ Intellectual property
- ▲ Export regulations
- ▲ Other legislation



Timeline for 9.6.05



34 builds

6 builds

22 ✓

6 ✓

12 ✗

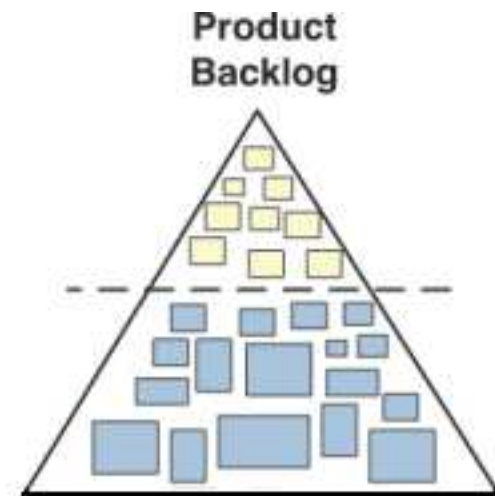


Product Backlog

▲ User stories

▲ New development

▲ Maintenance



Uniface

Wiki Timeline Roadmap View Tickets Teams Dashboard

Actions

- New Requirement
- New Task
- New User Story
- New Bug

Backlogs

- Product Backlog
- Sprint Backlog For Sprint: 10.00eS1 C-Team [View](#)
- Release Backlog For Milestone: 10.00e [View](#)
- Release Requirements For Milestone: 10.00e [View](#)

Tickets

- Active Tickets By Milestone
- Accepted, Active Tickets By Owner
- Accepted, Active Tickets By Owner (Full Description)
- All Tickets By Milestone (Including Closed)
- My Tickets
- Active Tickets, Mine First
- Tickets By Cat
- 'Never' Tickets (Gerton)
- All Non-Closed Tickets With Description
- Stories For Team C

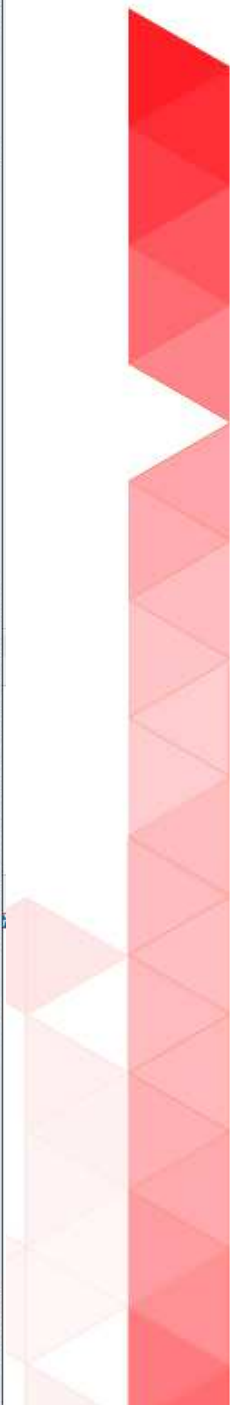
Wiki

- Index By Title
- GridTestProject
- CPAN/Update/Module 9608RTCMachines
- Uniface/mobile

Release Requirements for 10.00e

Summary

ID	Summary	Sprint	Status	Product Area	Story Points	Mijipaal	Eigenaar
15226	Theme: Repository modifications		new				Team 10
13323	dict: Add new (IDE) definitions to DICT10	10.00eS1 C-...	estimated	configmana...	5	10.00e	C-Team
13322	dict: Implement migration utility via map-file: all excluding new Proc Containers	10.00eS1 C-...	estimated	configmana...	8	10.00e	C-Team
13308	dict: Adapt the IDE to the new DICT10 definitions	10.00eS1 C-...	estimated	editors	3	10.00e	C-Team
13285	dict: Add IDE mode to compiler that reads from new DICT10 definitions: Component and ...	10.00eS1 D-...	estimated	editors	5	10.00e	D-Team
15399	dict: Add IDE mode to compiler that reads from new DICT10 definitions: Libraries	10.00eS1 D-...	estimated	editors	5	10.00e	D-Team
13324	dict: Enhance /import to detect new DICT10 tables	10.00eS1 D-...	estimated	configmana...	1	10.00e	D-Team
15486	dict: Separate builds for Classic and IDE	10.00eS1 C-...	estimated	configmana...	3	10.00e	C-Team
15404	dict: Adapt the IDE to the new Proc container definitions		new	editors		10.00e	michel
13282	dict: Add IDE mode to compiler that reads from new DICT10 definitions: new Proc Conta...		new	editors		10.00e	michel
13284	dict: Remove old (IDF) definitions from DICT10		new	editors		10.00e	C-Team
12045	dict: Migrate the RT-testdata		new	editors		10.00e	C-Team
15402	dict: Conversion utility for classic to standard containers		new	editors		10.00e	C-Team
15226	Theme: Entity Editor		new				Team 10
13309	editors : Entity Editor (H), CRUD, Generic		new	editors	2	10.00e	Team 10
13310	editors : Entity Editor (H), Data Structure, Generic		new	editors	2	10.00e	Team 10
13312	editors : Entity Editor (H), Key definitions, Generic		new	editors	10	10.00e	Team 10
13311	editors : Entity Editor (H), Write Script pane, Generic		new	editors	5	10.00e	Team 10
13314	editors : Entity Editor (H), Load definitions, Oracle only		new	editors	15	10.00e	Team 10
13313	editors : Entity Editor (H), Relation editor, Generic		new	editors	10	10.00e	Team 10
13307	editors : Entity Editor (H), Migration, Respository changes		new	editors	5	10.00e	Team 10

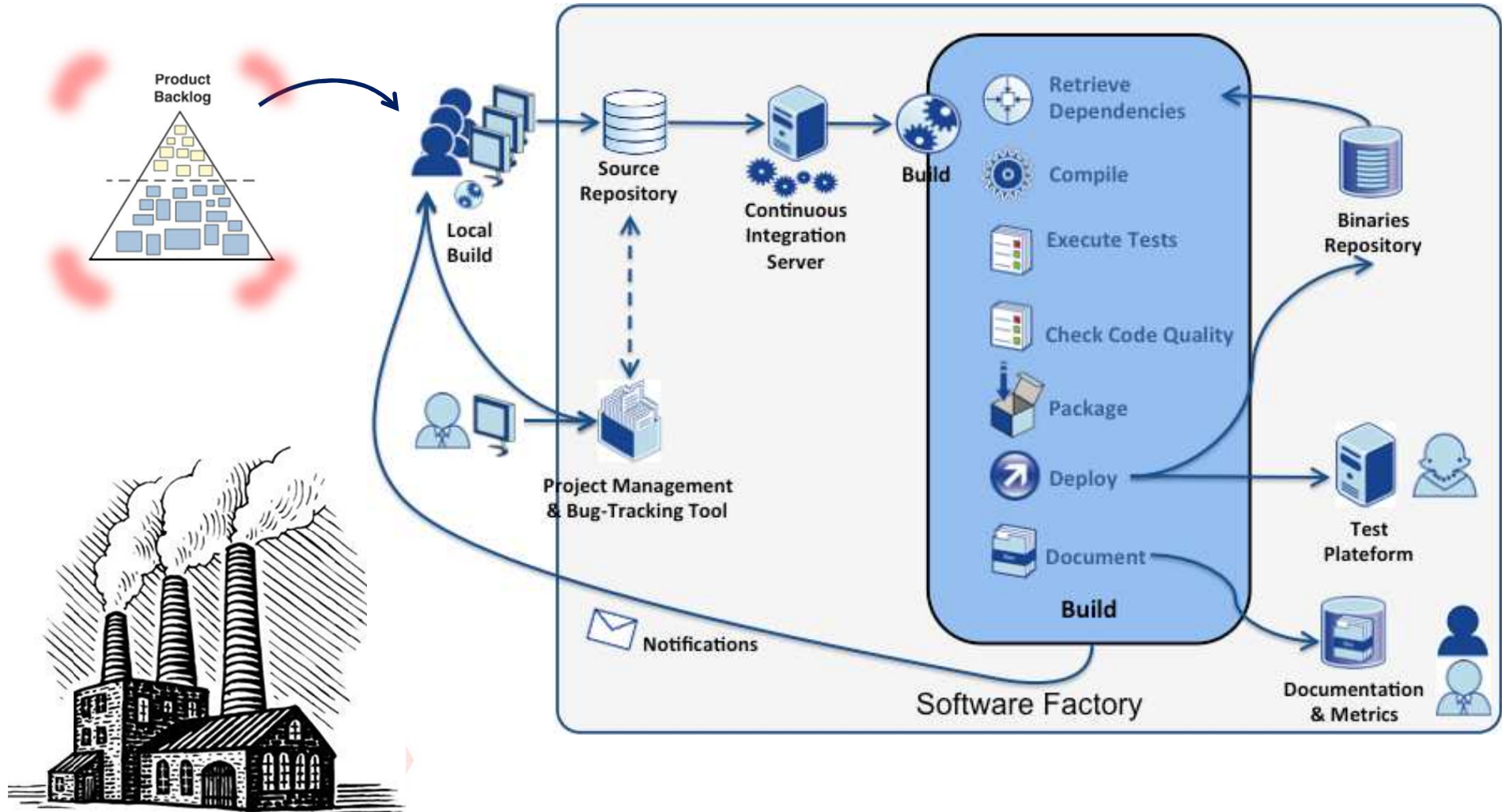


Patch	EOD	GA	Total # Issues	Customer Issues new
X302	16-Oct-2013	25-Oct-2013	10	7
E121	30-Oct-2013	08-Nov-2013	7	2
X303	13-Nov-2013	22-Nov-2013	14	9
E122	27-Nov-2013	06-Dec-2013	13	4
MX03	04-Dec-2013	18-Dec-2013	30	
X401	22-Jan-2014	29-Jan-2014	26	21
X402	26-Mar-2014	04-Apr-2014	23	15
E123	26-Mar-2014	07-Mar-2014	13	8
9.6.02	05-Apr-2014	03-Jun-2014	3	1
MX04	22-Apr-2014	29-Apr-2014	15	7
X501	18-Jun-2014	27-Jun-2014	13	5
E124	01-Jul-2014	14-Jul-2014	4	
X502	15-Jul-2014	25-Jul-2014	9	8
X503	13-Aug-2014	22-Aug-2014	11	10
MX05	01-Sep-2014	08-Sep-2014	2	2
X505	26-Sep-2014	02-Oct-2014	10	10
X504	01-Oct-2014	30-Oct-2014	5	4



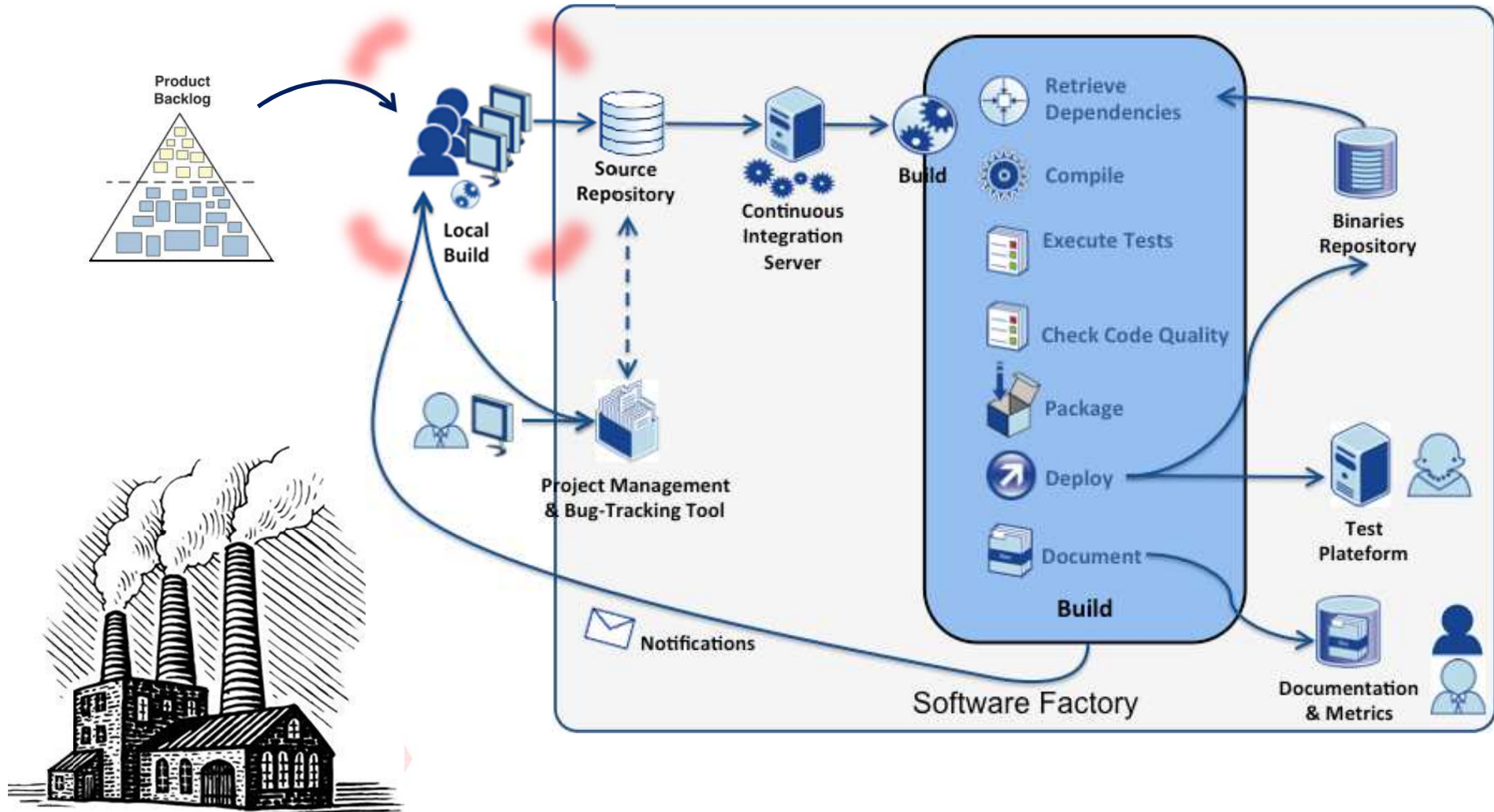
Software factory

From code to product



Software factory

From code to product



Source Repository

Sources of:

- ▲ All releases and patches since Uniface 7
- ▲ Software Factory
- ▲ Test Framework
- ▲ Automated Tests
- ▲ External libraries
- ▲ Installer
- ▲ DLM



Source Repository in numbers

- ▲ Hundreds of Releases and Patches

- ▲ Product Source code:

 - ▲ 5,000 files, approx. 2.500,000 lines

- ▲ Software Factory Source code:

 - ▲ 20,000 lines of code

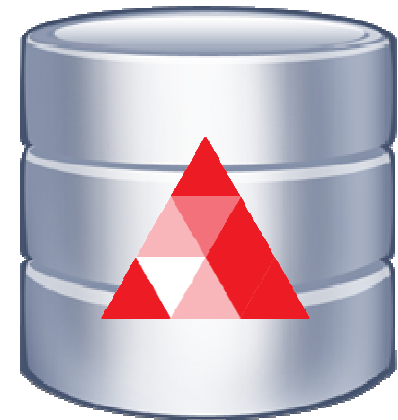
- ▲ 4GL (IDE)

 - ▲ Several hundred components

- ▲ Automated Tests

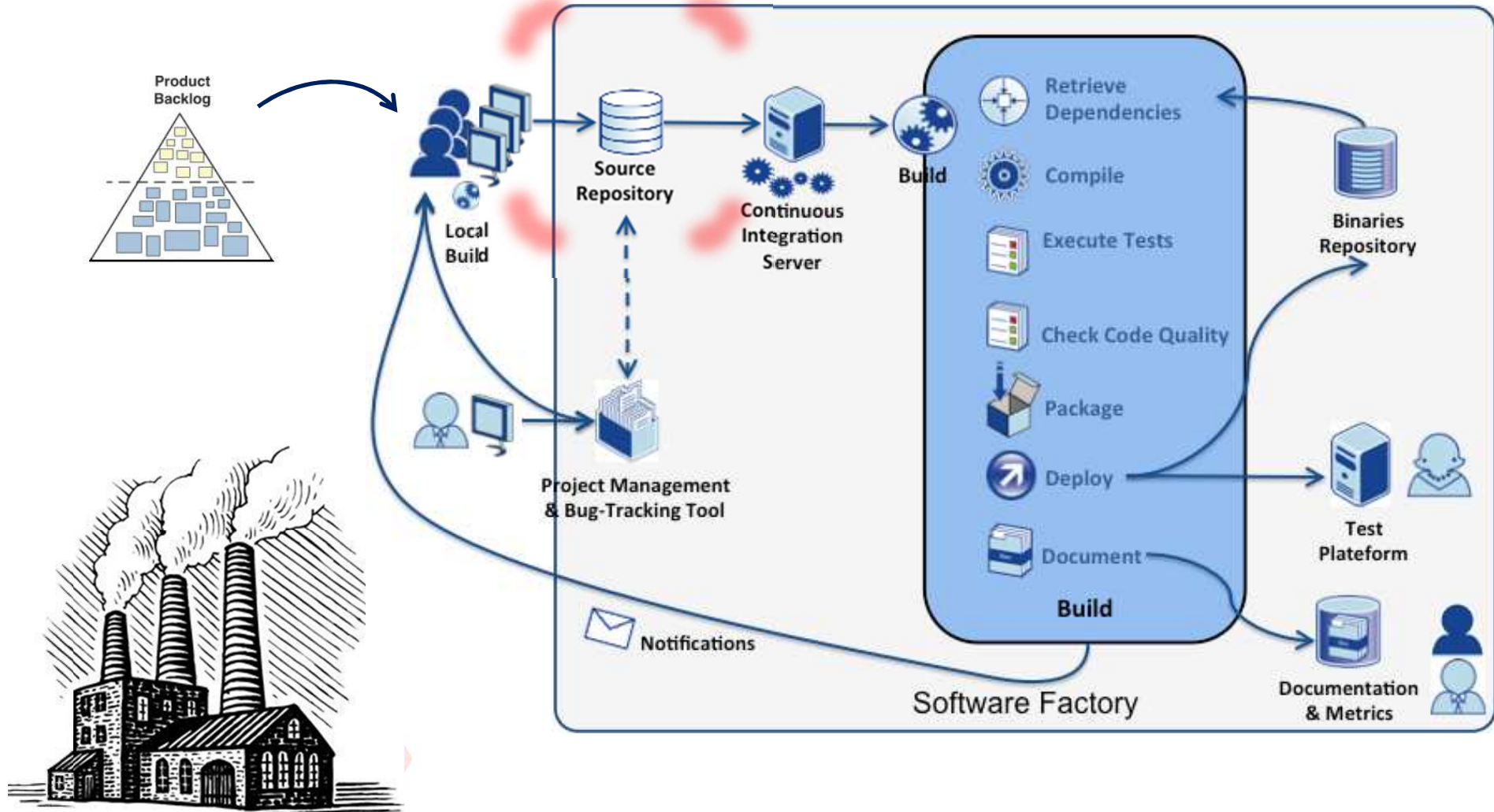
 - ▲ > 5000 4GL Test components,

 - ▲ > 100,000 individual test cases



Software factory

From code to product



From code to product

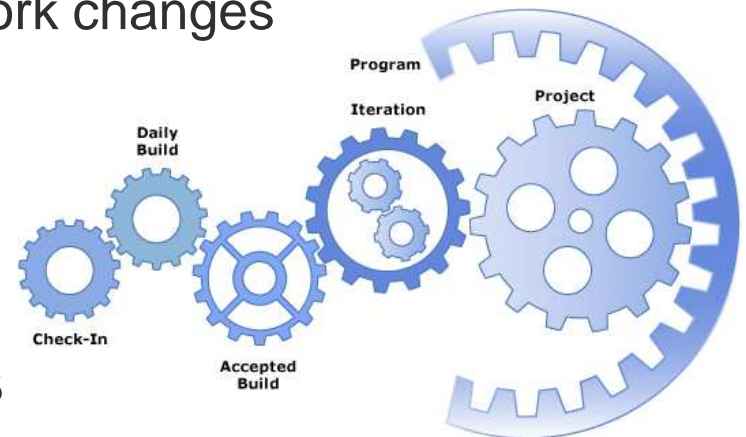
Building process

Daily builds take Uniface to its next increment

- ▲ Selection of tasks for a build
 - ▲ Developers/Tester submits tasks into source control e.g. product, automated tests, framework changes

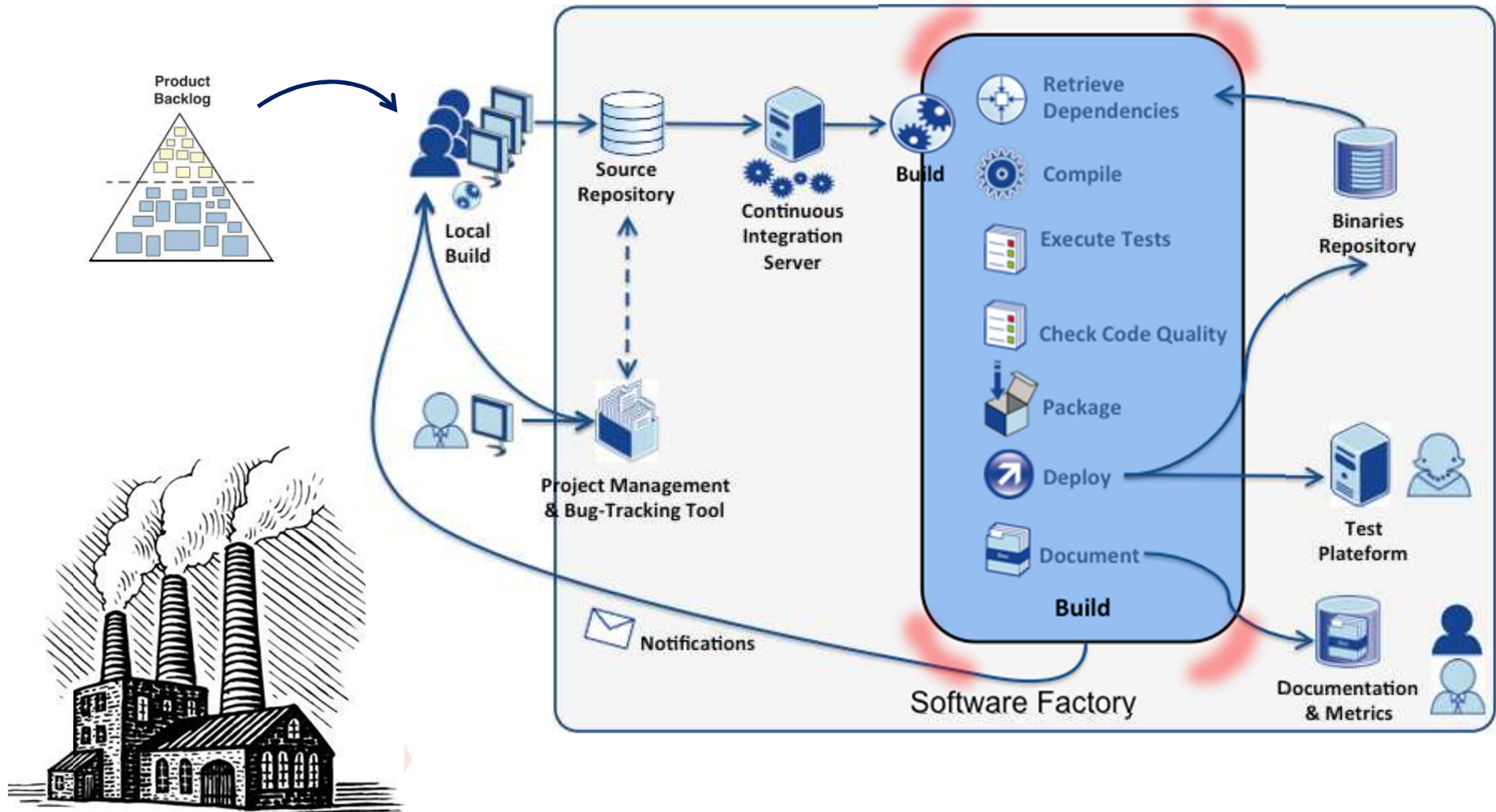
Start:

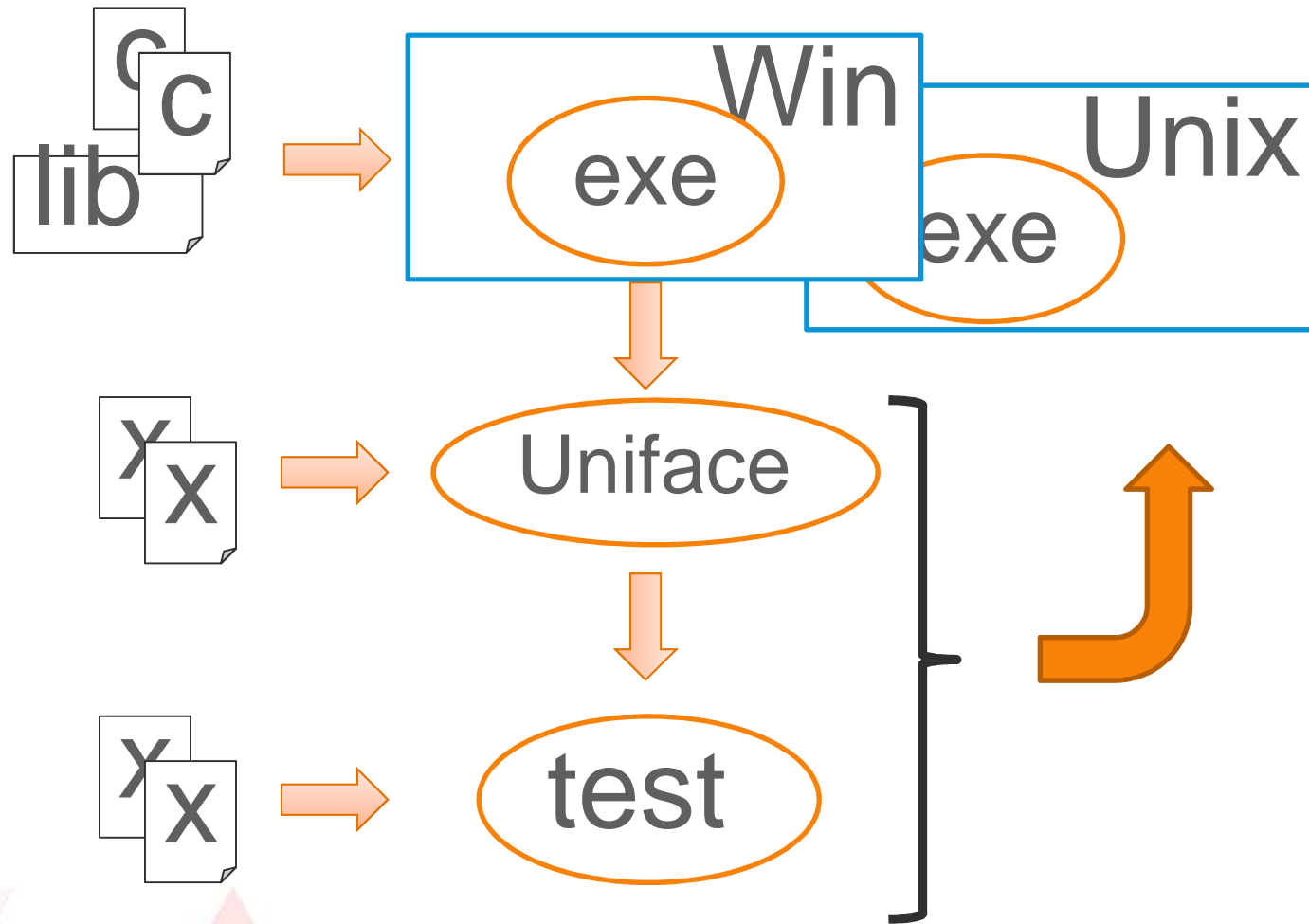
- ▲ Build - Product & Test assets
- ▲ Test - Automated Regression tests
- ▲ Accept/Reject



Software factory

From code to product





From code to product

Ensuring quality

- ▲ Build and Test on All Target Platforms
- ▲ Compatibility
- ▲ Test platform-specifics as well, e.g.
 - ▲ ASCII vs EBCDIC,
 - ▲ multi-byte and other database settings
 - ▲ Different browsers
- ▲ Broad
 - ▲ Back-end, Drivers, GUI, USP/DSP, Devices
- ▲ Tools:
 - ▲ Ranorex, UDOH, Uniface(!)
 - ▲ Many more, including custom-made tools



Infrastructure



Build

- ▲ 3 Windows machines / code line
- ▲ 14 Unix/Linux, 4 VMS, 2 iSeries, 1 zSeries

Test

- ▲ >100 Database servers
- ▲ 4 Test Build machines
- ▲ 20 Windows machines per code line for GUI testing

Pre-build environments

- ▲ 25 machines

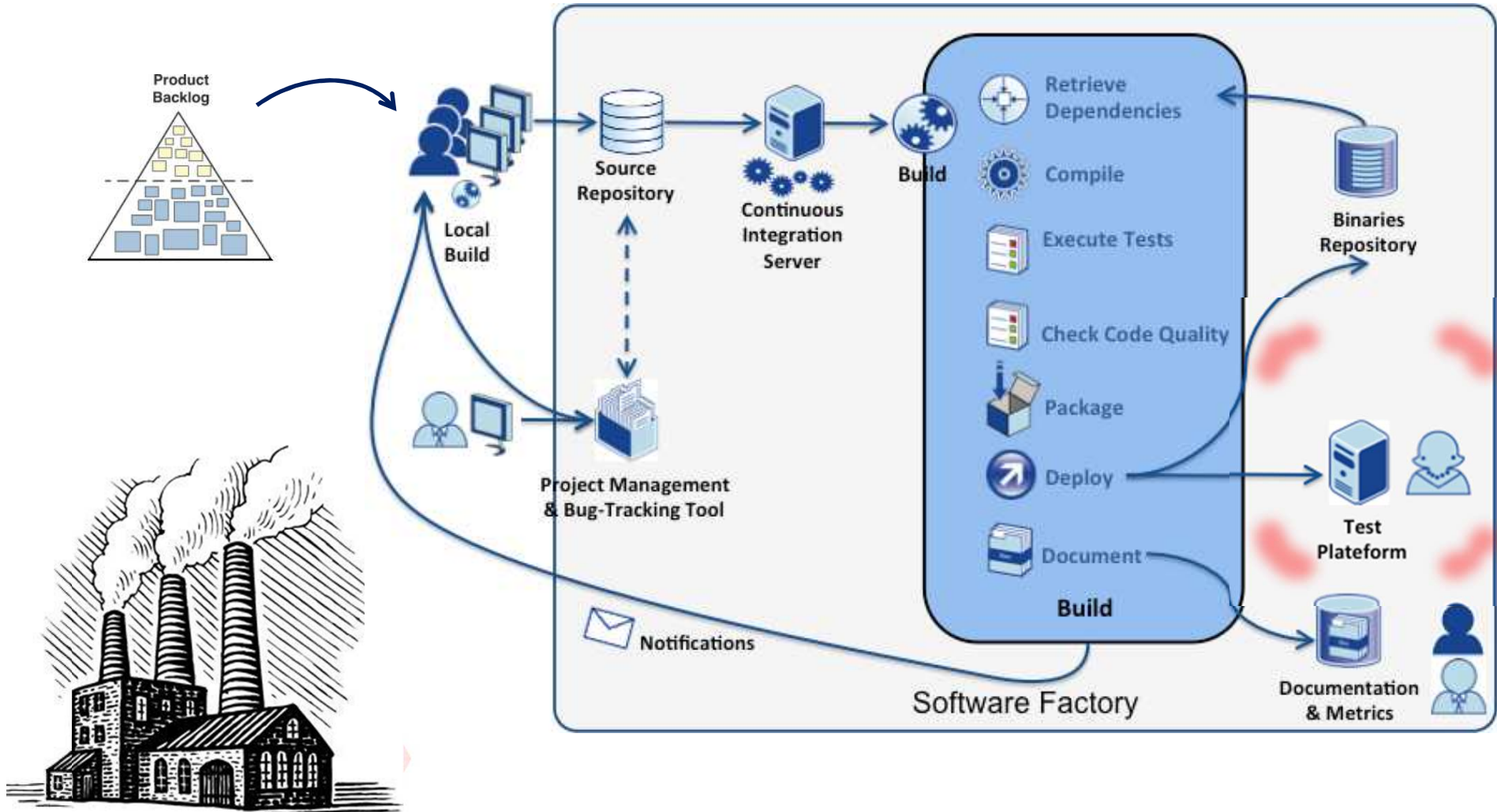
UNIFACE 960502

Latest	ALL							REP						
	min	VST	W2K	WXP	WN7	WN1	TST	VST	W2K	WXP	WN7	WN1	TST	
colorlist	5			+										
cross_reference	5			+						+				
debugger	12		+	+					+	+				
dib_cc	20		+	+						+				
export	5			+										
extra_editbox	55			+										
imagemenu	37			+										
menu_test	35			+										
new_rt	45			+										
ria_component_editor	15			+						+				
ria_crud	10			+										
ria_events_triggers	20			+										
ria_field_syntax	10			+										
ria_html_copy	5			+						+				
ria_html_generator	5			+						+				
ria_html_source_editor	10			+						+				
ria_layout	5			+						+				
ria_layout_binding	15			+						+				
ria_onedit	20			+										
ria_prop_inspector	5			+										
ria_udoh	25	+		+						+				
ria_udoh_all	35	+		+						+				

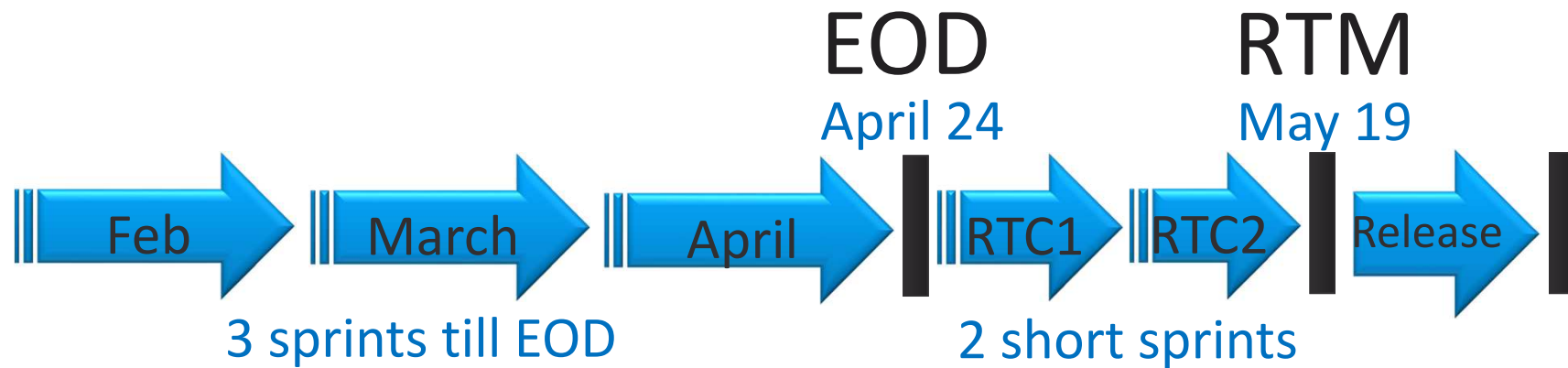


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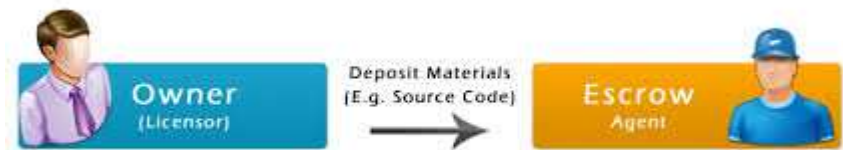
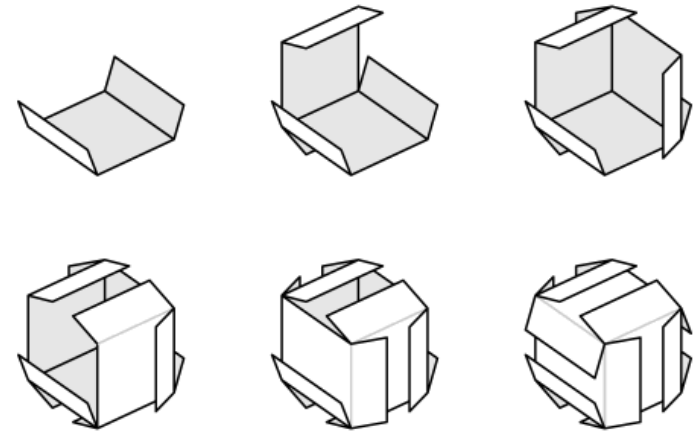


Release Engineering

Product delivery

Shipment

- ▲ Release Notes
- ▲ Release information
- ▲ Readme
- ▲ Licensing information
- ▲ Copyright Deposit
- ▲ Source code Escrow
- ▲ Publishing / Distribution



Export Legislation

Compliancy - Use of Cryptographic Technologies

- ▲ Classified by the US and EU authorities as a **'dual use good'**

- ▲ Export license

 - ▲ Exempt from applying

- ▲ Scans on source and binary libraries



Other Legislation

Before you can download our software
EU and US:



- ▲ Do not allow shipment to certain countries
- ▲ Have an IP blocked list
- ▲ Denied entity lists

Checks

- ▲ Regular basis
- ▲ Audit trail





Thank you!

Q&A

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