



Product Roadmap

26 November
Michael Taylor, Product Manager

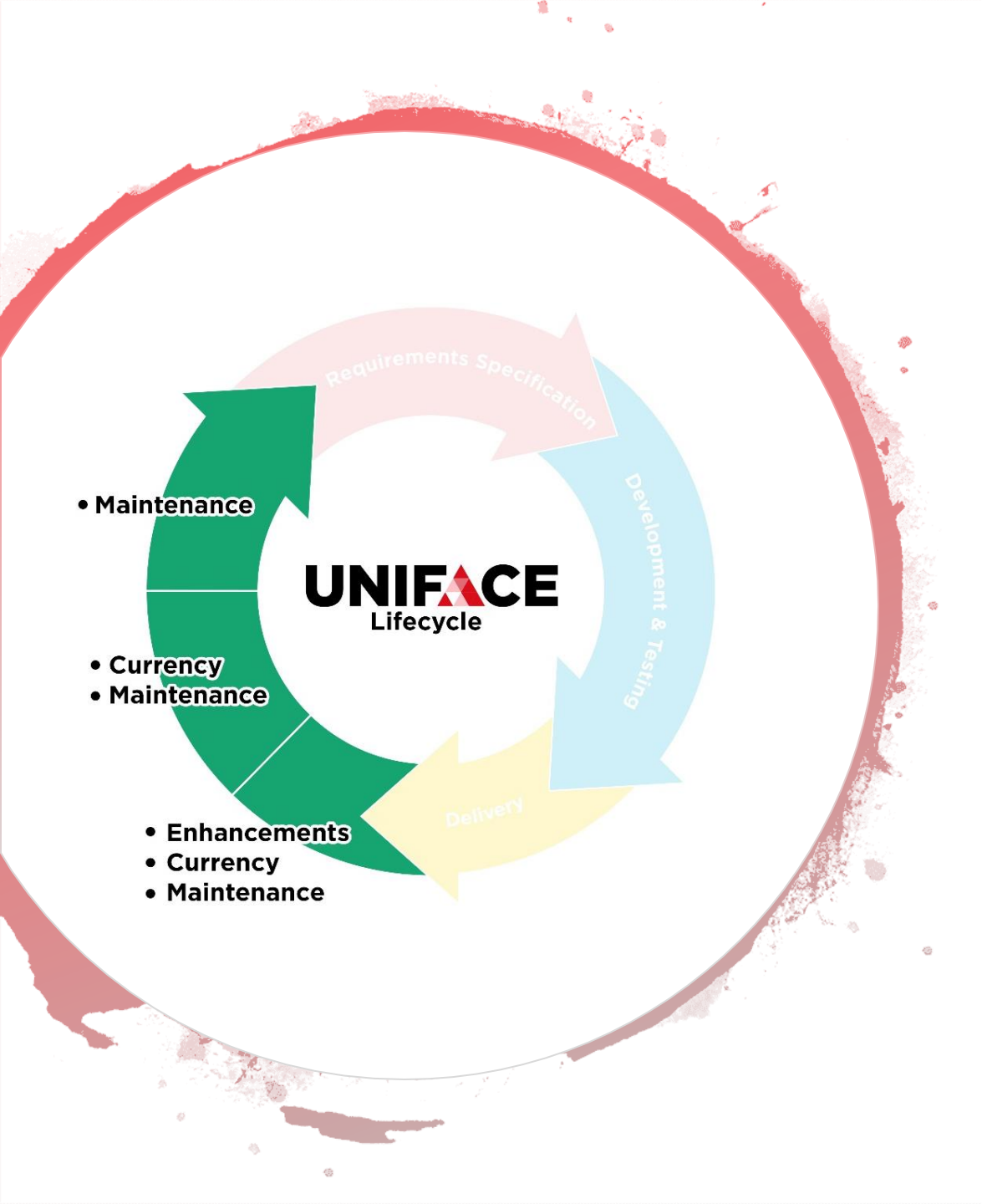
Agenda

- Recent news
- What we are working on now
- Looking into the future

A large, irregular red ink splatter or blotch is centered on a white background. The splatter has a textured, watercolor-like appearance with various shades of red and some darker, almost black, areas. It has several smaller droplets and splatters extending outwards from the main mass.

9.7 and 10

Recent News



Uniface 9.7

- Uniface 9.7.04 released August 2017
 - Cloud deployment
 - CentOS Linux support
 - Oracle 12.2 support
- Uniface 9.7.05 released August 2018
 - Security
 - Cloud Windows deployment
- 9.7 is in maintenance mode
 - End Of Support: 31st December 2020
- Patch naming changed from 9.7.05



UNIFACE 10

Enterprise Edition

Uniface 10

- Uniface 10.3 released August 2018
- Full development capability:
 - Mobile, Web, Client Server & Batch
- Frequently updated with new features
 - Patch naming convention changed
 - 10.03.01-001, 10.03.01-003, ...
 - Focused around migration and developer performance
 - New features announced on Uniface.info

A large, irregular red ink splatter or blotch is centered on a white background. The splatter has a textured, watercolor-like appearance with various shades of red and pink. The text "What's New" is written in a bold, white, sans-serif font across the middle of the red area.

What's New



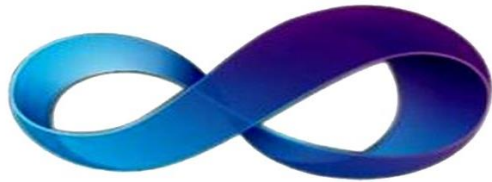
Security

- A big focus area
- More than the product
 - The tools we use to build & deliver
 - How we build & deliver
 - The functionality available in Uniface
- External consultancy
- Security is a shared responsibility



Security – In Uniface

- Tamper proof Uniface distribution
 - Signed executables
- 3rd party technologies
 - ICU
 - Open SSL
 - On-going process
- C++ runtime updates
 - Windows (VS2015)
 - RedHat/CentOS (LID)
 - Solaris (SOB)
 - AIX (RSG)



Security - Visual Studio 2015 update

- Supported by Microsoft
- 6 developers for 48 weeks
- True 64Bit GUI
 - Visual studio 2005 used only 32bits
 - Bugs fixed
- Performance improvements of up to 20%
- ICU Updated
- SOAP Stack updated



Security – For applications

- TLS Network Driver
 - Client Server
 - PostMessage
 - Debugger
 - Web Request Dispatcher (WRD)
- Public/Private web for service business logic
 - Option in Uniface 9.7
 - Required in Uniface 10.3 (changed behaviour)
- Mobile/web tamper protection features
- PathScrambler
 - login credentials
 - Other information
- Uniface.info and/or release notes for high level details



TLS Network Driver

- Built using OpenSSL www.openssl.org
- Layer over TCP/IP
- Choice of encryption ciphers
 - Application characteristics and requirements
 - Chatty or large amounts of data
 - Policy requirements
 - Is there customer standards?
- Encryption has a performance impact

PSK based TLS			Extra overhead by different sizes of data passed				Certificate based TLS			Duration of different sizes of data passed through in ms			
Server configuration	Network Connection	Scenario	10KB (1000x)	100KB (1000x)	1000KB (1000x)	10000KB (1000x)	Server configuration	Network Connection	Scenario	10KB (1000x)	100KB (1000x)	1000KB (1000x)	10000KB (1000x)
Exclusive userver	TCP	Activate	760 ms	3170 ms	29560 ms	535790 ms	Exclusive userver	TCP	Activate	760 ms	3170 ms	29560 ms	535790 ms
	PSK-AES256-CBC-SHA	Activate	+12%	+13%	+11%	+15%		DES-CBC3-SHA	Activate	+24	+87	+97	+92

YOUR APPLICATION WILL BE DIFFERENT!

	PSK-3DES-EDE-CBC-SHA	Activate	+71%	+121%	+251%	+109%		TCP	DB	490 ms	2400	22800	425120
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Values are inline with OpenSSL's measurements

				ms	ms	ms							
	PSK-AES256-CBC-SHA	DB	+10%	+16%	+10%	+21%		RC4-MD5	DB	+69	+39	+37	+32
	PSK-AES128-CBC-SHA	DB	+16%	+15%	+21%	+20%		RC4-SHA	DB	+10	+13	+16	+18
	PSK-3DES-EDE-CBC-SHA	DB	+104%	+143%	+160%	+141%							
	PSK-RC4-SHA	DB	+8%	+12%	+18%	+18%							

[illegible]

- Embedded DSPs
- Multi-views
- Dynamic syntax checking
- Performance
- Offline datastore
- HTML 5 Widgets
- DOM API – access to HTML



Uniface Mobile

- Responsive Web GUI
 - Delivered Uniface 9.6/9.7
 - Enables browser access from any device
- Installable (Hybrid) Mobile Apps
 - Delivered in Uniface 9.7.02 and 10.2
 - Enables installation on mobile devices
 - Enables distribution via app store



Currency

- Support for Cloud deployment
 - RedHat, CentOS, SUSE and Windows Server 2016
 - SQL Server, Oracle, MySQL and PostgreSQL
 - Amazon AWS and Microsoft Azure tested
- New platform installation codes (Updated compilers)
 - Red hat and CentOS - LID
 - IBMAIX - RSG
 - Solaris – SOB
- IBM iSeries i7.3 (9.7 Only – 10 to follow)
- Databases
 - Oracle 12c R2 on CentOS
 - Informix on Windows 2016
 - DB2 v11 on Windows



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New in 10



Developer productivity

- Integrated form painter
- Clickable errors
- Create table utility
 - Created from the IDE using driver settings
 - Uniface repository
 - Customer tables
- Load definitions (MS SQL, Oracle & PostgreSQL)
- Open Editor by child object
- Double-click open
- Double click - Structure to code container
- Auto accept property update
- Find/Replace
- Global proc editor



IDE integration

- Finalized repository
 - Export/Import migration from previous Uniface versions
 - Supply the IDE dictionary
- Open Uniface IDE APIs and Plugins
 - Extend the IDE functionality
 - Replacement for the 'additional menu'
 - Promotes community collaboration
 - Presents business opportunities

Migration/Version up

- Important part of the Uniface 10 project
 - New migration tooling
 - Undergone a thorough testing program
 - Internal apps and customer apps we have 'in house'
 - Migration 'roadshow' conducting test migrations 'on site'
- Continual feedback to development
 - Objective is to make migration easy, simple and painless
- Ready for customer migrations



In the Labs

A large, irregular red ink splatter or blotch is positioned on the left side of the slide, extending from the top left towards the bottom center. It has a textured, painterly appearance with various shades of red and some darker spots. The rest of the slide has a plain white background.

Developing Uniface

Continuing our Agile journey

- Focusing on Features
- Teams build around features/skillsets
- Frequent patches
 - Main code line – Always potentially deployable package
- Release as soon as the feature is Done!

Internal projects

- Moved 3GL sources to Git
 - All versions and patches from Uniface 8.3
- Update patch naming convention
- Modernization of our testing framework
 - Cloud/DevOps methodologies

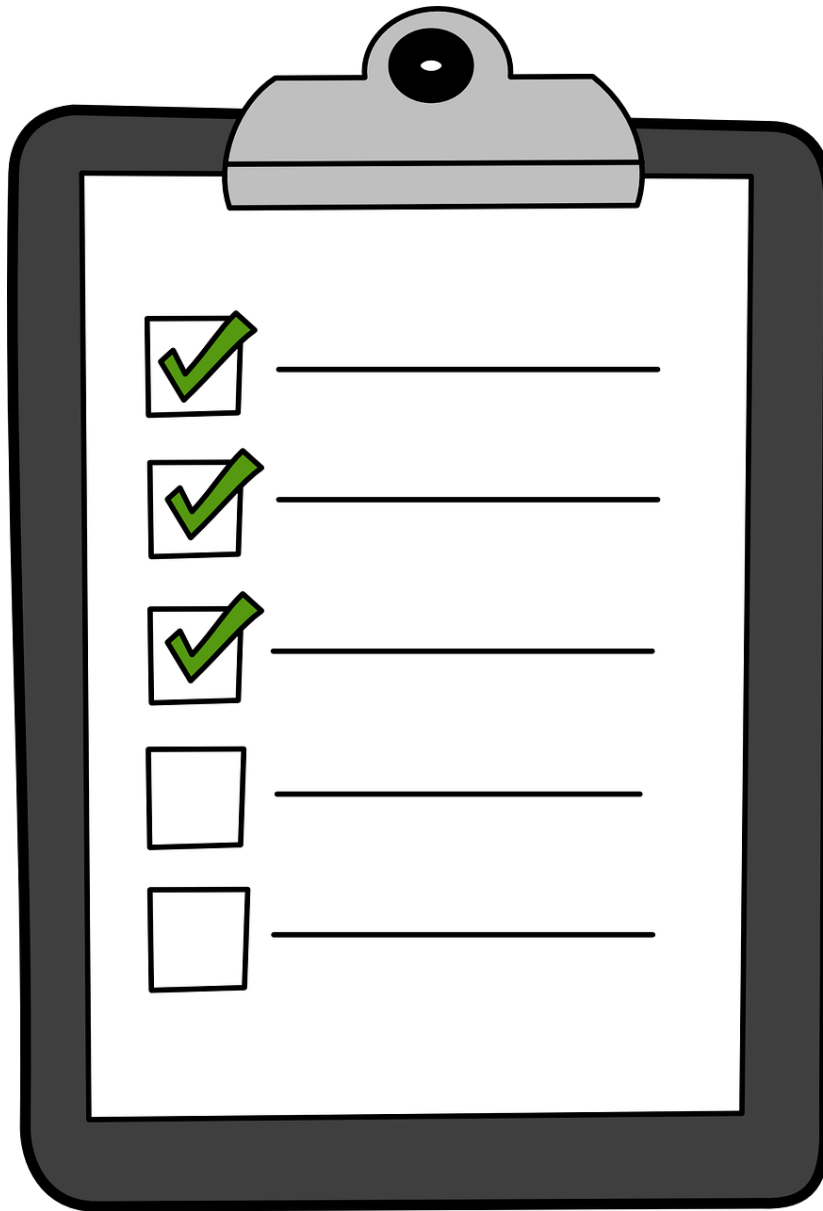
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Current work – Uniface 9.7 and 10

- Security
 - Web TLS - WRD to urouter
 - Memory management
- Currency
 - Oracle 12.2 on SUSE Linux



Current work – Uniface 10

- Developer productivity
 - Usability
 - Code editing
 - Search and Replace
 - Block comments
- Web/Mobile
 - Enhanced Browser/Server validation and reporting
 - Simplify integration with CSS frameworks
- Currency
 - iSeries (already available on 9.7)

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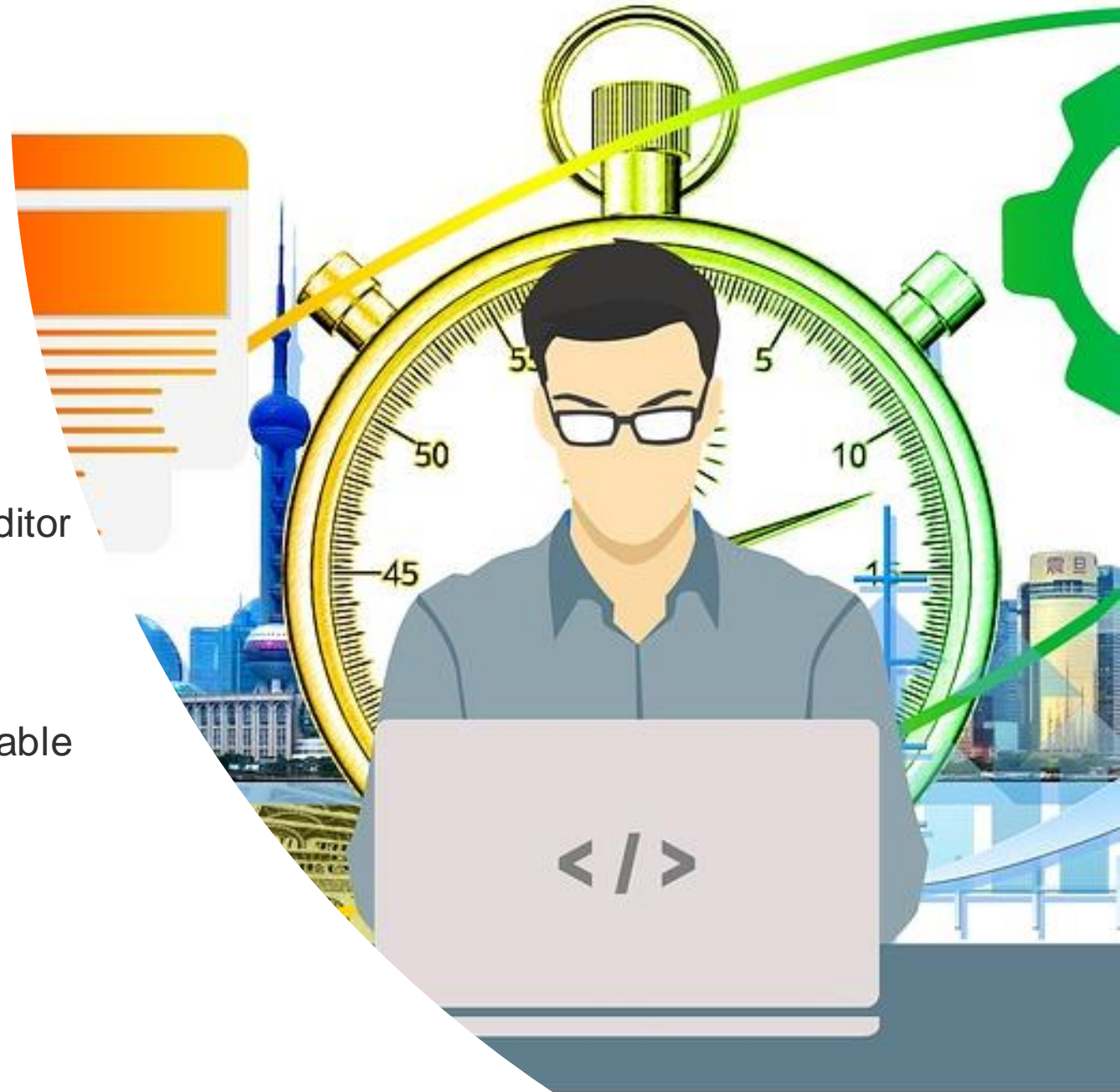
Security

- Urouter monitor over TLS
 - All urouter traffic
- Upopmail over TLS (U2.0?)
- LDAP over TLS
- Ongoing



Uniface 10 Productivity

- Filtering
- Fast Form
- Uniface Coding - enabling more from Scintilla Editor
 - Code completion
 - Right to Left Support
 - Statement and operations hinting
 - There are a lot of Scintilla capabilities to enable
 - Expect a phased delivery
- Navigation



Community Edition

- Free to use development release
- Encourage new Uniface developers
- Encourage existing customers to use new features
- Encourage new/more Uniface initiatives
 - New applications
 - New additions to the IDE
 - New contributions to samples, GitHub project, etc.
- Expect in 2019 timeframe
- Requires updating the license manager software

UNIFACE 10
Community Edition





Uniface 10 Version Control

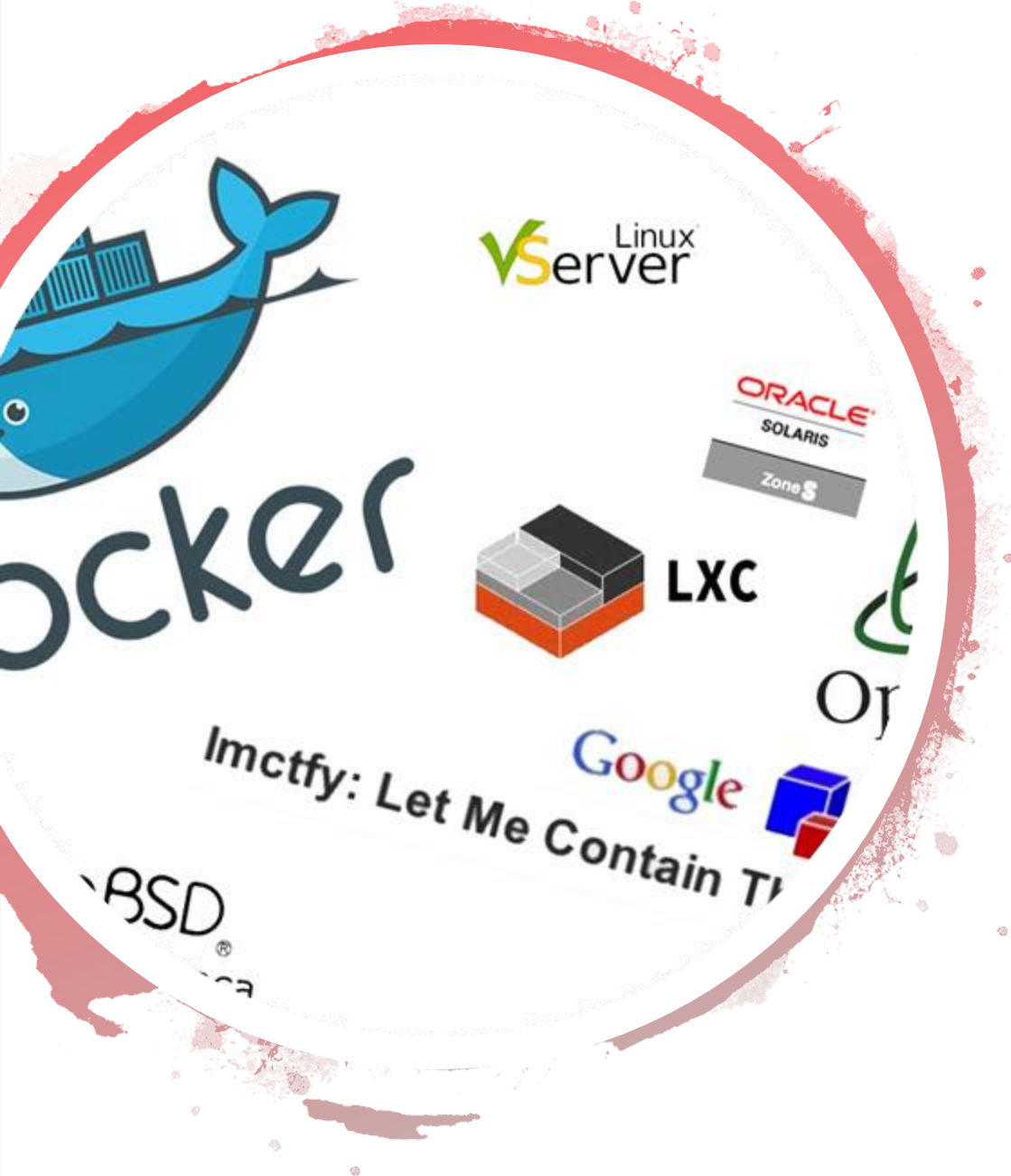
- Phase 1 – Workspace support
 - Uniface 10.3 timeframe
 - File format designed for Version control
 - Granularity as small/large as required
- Phase 2 Synchronization with Version Control storage
 - Will focus on git (previously suggested SVN)
 - Integration with git client functionality
 - Not redevelop git

Web Services & Debugging

- Web Services usability
 - Current Uniface capabilities are quite strong.
 - Make easier and more productive
 - Eliminate/reduce the need for 3rd party/external technologies.
 - Phased delivery in 2018/2019
- Enhanced debugging
 - Expand current debugging capabilities
 - Graphical, integrated, modern, etc.

RESTful
AREA





Uniface Cloud Container deployment

- Distribute the Uniface product in a container
- Our thinking:
 - Scripting capabilities provide customers with an easy, standard way to deploy applications.
 - Available in Uniface 10, 2018/2019 delivery
 - Both cloud and on premise deployment.



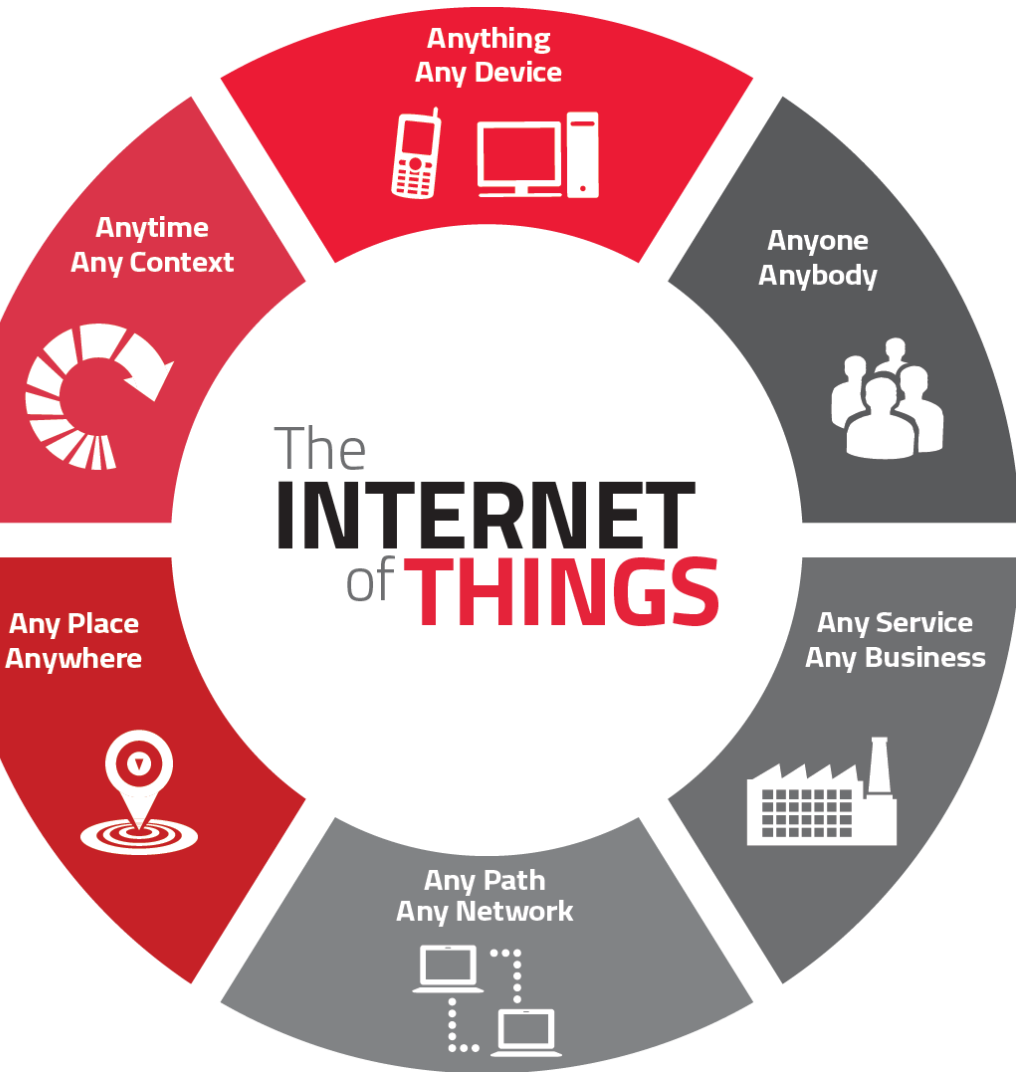
Web

- Error handling
 - Session timeout
- Handle typed data in widgets
- National language support
- HTML Widget templating



Uniface Mobile

- Offline application execution
 - Compile resources into the app
 - Run after install with no network
- Offline application data
 - Some functionality available today
 - Large datasets
 - Data synchronisation
 - Upgrading



Internet of Things

- The internetworking of connected devices
- Uniface is a very compelling solution for IoT data

THANK YOU & QUESTIONS

