

Requirements Appendix

YF' - Yes Fully, provided', 'YC' - Yes with customisation, 'AC' - In separate module (s) at Additional Cost,
'TP' - provided with 3rd party tool, 'NA' - not applicable, can't be provided.

Requirements	Availability
Security	
No components need to be installed on Infrastructure Servers (e.g. Domain Controllers, Proxies, DNS, etc)	YF
Every server component is implemented as Windows Service or Unix/Linux Deamons (No interactive GUI server components)	NA
Every server component Service runs from a domain account with specific (limited) privileges	YF
If Shared Folders are used then limited rights (e.g. no Full Control) should be applied	YF
DB system processes (e.g. MSSQLSERVER and SQLSERVERAGENT) run from a domain account with specific limited privileges	YF
Application Accounts Credentials should be stored encrypted either in DB or external file	YF
All components must be installed on C: Partition while Data Folders & Database files on different Partition (i.e. D:)	YF
All Application Data Folders must have the minimum possible rights defined	YF
Application must be synchronized to system date & time	YF
Default settings such as passwords, networks settings (e.g. SNMP), unnecessary accounts and system security parameters must be changed or removed before systems installation to prevent misuse. All unnecessary services and insecure protocols must be disabled and all unnecessary functionality (e.g. scripts, drivers, features, subsystems, file systems, etc) should be removed. Appropriate Registry Key Permissions must be verified and set. Unnecessary web servers must be removed. Application components must have no dependencies upon such settings.	YF
Domain, DB and any other system account are not needed for 3rd party supplier usage - support	YF
A Server Role Segregation Policy is always followed (e.g. separate WEB, DB, Application servers) as well as Separate DMZ for each role.	AC
All management consoles (System & Application) should be accessed only through encrypted communication (SSL, VPN/ipsec)	YF
The Provided Solution must be compatible with Monitoring & Anti-Virus platforms, latest Vendor supplied security patches for OS, DB, etc	AC
Ability to create/modify password rules such as length, complexity, history, etc	YF
Compatibility with Internationally accepted Technical Security Standards (Hardening)	YF
No need of group, shared, or generic accounts and passwords	YF
All Server components must be compatible with platforms used in our Infrastructure such as .net framework, Anti-Virus, Monitoring tools and latest Vendor supplied security patches for OS.	YF
Database Server	
Database accounts must not have special roles (e.g. Public) or elevated privileges.	YF
Account with DB ownership must be different from Application Account to the DB	YF
DB User Management Interface should be handled from Application	YF
Usage of database account authentication against Microsoft LDAP	YF
No need for database group, shared, or generic accounts and passwords	YF
Client Applications – Rollout & Maintenance	
Application Client should have Automated Installation and Update functionality	YC
Client Application should be installed on File Server (with a single Mapped Drive) and operate with shortcut only from any terminal	YF
Client Application must be compatible with platforms used in our workstations such as .net framework, Anti-Virus, Monitoring tools and latest Vendor supplied security patches for OS.	AC
Client Application must be operated from a domain user account with plain user privileges	YF

Network	
Ability to function properly within a DMZ environment using a limited number of ports such as 80 (HTTP), 443 (HTTPS), 21/22 (FTP/sFTP), 1433 MS-SQL.	YF
Application	
Session Timeout should be between 10-30 minutes	YF
Lockout Policy (usually after 3 unsuccessful attempts)	YF
Concurrent Multiple logins from the same user is not allowed	YF
If Systems intercommunicate with files then specific minimum File/Folder access rights as well as file encryption should be applied.	YF
Role Based Access Control capabilities should be in place using the following scheme: -> Functionality access rights control --- ->Form access rights control --- -> Field access rights control (If applicable, according to requirements)	NA
User Authentication is required for application access, AD integrated authentication is preferred	YF
Ability to perform Input/Output Data Check & Validation	YF
Ability for Proper application error handling (user friendly error screens & messages)	YF
Ability for Application User and Privilege Users Activity Logging and appropriate log history	YF
Application Audit Log Review & Reporting Functionality	YF
Preinstalled or predefined vendor accounts must be removed prior to production deployment	YF
Application must provide Users Administration Tool (creation, permissions & roles assignment etc) as a separate entity (exe or site)	AC
The user of the application must not be able to access the application DB directly	YF
PCI DSS	
Do not store sensitive authentication data after authorization (even if encrypted) "Not on US" and "on US" cards	YF
Do not store the full contents of any track from the magnetic stripe (located on the back of a card, contained in a chip, or elsewhere)	YF
Do not store the card-verification code or value (three-digit or four-digit number printed on the front or back of a payment card) used to verify card-not-present transactions. * Incoming transaction data * All Logs (For Example, Transaction, history, debugging, error) * History Files * Trace Files * Several Database Schemas * Database Contents	NA
Do not store the personal identification number (PIN) or the encrypted PIN block	NA
Mask PAN when displayed (the first six and last four digits are the maximum number of digits to be displayed)	NA
Servers of Cardholder Data Environment scope is placeable in separate isolated zone DMZ	NA
Use strong cryptography and security protocols such as SSL/TLS, FTPs, sFTP or IPSEC to safeguard cardholder data during transmission over open, public networks	NA
Use strong Secure cryptographic storage and secure communications (SDLC_OWASP)	NA
Production data (live PANs) must not be used for testing or development	NA
Functionality	
File Based Datasources	
The solution supports the reading and mapping of XML data sources	YF
The solution supports the reading and mapping of JSON files	YF
The solution supports the reading and mapping of CSV	YF
The solution supports the reading and mapping of TXT files	YF

The solution supports the reading and mapping of XLS/XLSX files	YF
Rest/ODATA API	
The solution can read from ODATA based sources	YF
Database Based Datasources	
The solution can read MS SQL Server database	YF
The solution can read IBM DB2 database	YF
The solution can read JBASE database	YC
The solution can read ORACLE database	YF
The solution can read OLE DB Data Source	YF
The solution can read ODBC Data Source	YF
The solution can read MY SQL database	YF
The solution can read MS Access database	YF
Multiple Data Sources and Filtering	
The solution can define multiple data sources for a specific template	YF
The solution can perform SELECTS on data sources to fill specific section or field in the template	YF
The solution can define User Input Parameters in templates	YF
The solution can define runt-time parameters in templates	YF
The solution does not support multi-source definitions.	NA
Wizards to be applied on datasources for resulting set	
The tool provides wizards to help designer define the result set (data source) using SQL tables and columns structure designer	YF
The tool provides wizards to help designer define the result set (data source) using Xpath designer	YF
The tool provides wizards to help designer define the result set (data source) using JsonPath designer	YF
The tool provides wizards to help designer define the result set (data source) using Odata designer	NA
The tool has its own data preparation and transformation tool that prepares data sources needed for templates	YC
Other transformation capabilities (please specify)	YF
Template Designer Environment	
The solution has its own IDE for your document templatzation.	YF
The solution its an Add On in WORD for document templatISATION	YF
The solution its an Add On in EXCEL for document templatISATION	YF
The solution its an Add On in POWERPOINT for document templatISATION	YF
The solution its an Add On in PDF for document templatISATION	NA
The solution is an Add On in non-office application	NA
The solution requires a separate designing tool (such as Office, Publisher, PDF, etc) to structure and beautify the document	NA
The solution has its own design capabilities but not as rich as Office Applications.	NA
The solution allows the definition of variables within the template	YF
The solution allows the definition of calculated fields and use them throughout the template	YF

The solution allows the refence of variables within other variables	YF
Componetisation	
The solution allows for the definition of templates within templates (parent-child) and the reusability of templates.	YF
The solution provides automation for the update of master templates in case any of the child reference templates are modified.	YF
The solution provides for the conditional use of child templates based on business rules using data fields from the data source	YF
The solution allows the templatization of DOCX / XLSX / PPT / PDF DOCUMENTS and place output FORM-FIELDS	YF
The solution supports the creation of document sets (e.g. Customer Opening Document with the Welcome Letter together)	YF
The solution requires a 3 rd party tool or code library (e.g. PDF Merge) to create document sets during generation.	YF
A document template has Static Content (resides on document itself) and Dynamic Content (pulled from data sources). If there is a change in specific static content, describe the process to modify it and release it back to production.	YF
Can I specify read-only content and editable content during design so that during generation, the end result behaves like a word document or excel worksheet with some sections locked and some unlocked for end user?	YF
Structure	
The solution can place out tags in any part of the document (header, main, footer)	YF
Can you define sections in your documents and have a section read only and some other sections editable in the generated documents?	YF
Equations	
The solution allows operator equations on the output variables with EXCEL-LIKE functions	YF
The solution allows operator equations on the output variables with STANDARD OPERATORS (+,-,*,/,)	YF
The solution provides for the calculation of sub-totals and totals in tables using dynamic content from data sources	YF
Multilingual content using same template	
Please describe how would you handle multilingualism in document templates so that content is presented in the language intended? E.g. Templates in Russian, English, Greek.	YF
Barcodes	
The solution allows for the creation of barcodes based on data	YF
The solution allows for the creation of QR Codes based on data	YC
The solution requires an add-on to generate barcodes and/or qr codes	TP
Please elaborate how can I create OMR tags on the document	YF
Designer Skills Needed	
The skills needed for someone to start designing in the solution is IT-System Analyst Skills as it requires some programming language	YF
The skills needed for someone to start designing in the solution is Business Analyst Skills as it is OFFICE-LIKE environment	YF
Debugging Tools	
The solution provides for a runtime-test for debug a document templatization task	YF
Design Management	
Please explain the process to make a Microsoft Word Document into a template in your solution.	YF
Please explain the process to make a Microsoft Excel Document into a template in your solution.	YF
Please explain the process to make a Microsoft PowerPoint Document into a template in your solution.	YF
Please explain the process to make a PDF document into a template in your solution.	YF
Other features to consider	
Please note any other features to consider	NA
Conditional Logic	

The solution supports the definition of IF...ELSE logic to show/hide a content without the use of programming language.	YF
The solution support the definition of CASE / SWITCH logic to show/hide content without the use of a programming language	YF
The solution supports conditional logic with the use of programming language such as Javascript	YF
Dynamic/Nested looping	
The solution allows for the definition of dynamic tables (or or more rows) and template taking care of paging by it self without any coding. (e.g. list of transactions)	YF
The solution allows for the definition of dynamic tables (or or more rows) within tables and template taking care of paging by it self without any coding. (list of accounts within a list of branches)	YF
Auto layouting	
The solution fills data dynamically and moves content accordingly without the need to specify specific number of characters to be used. E.g. Amount field to be filled in a loan agreement document should not have leading or trailing blanks. Content should commence immediate after the amount (irrespective of size) is entered	YF
Output formats supported	
The solution supports generated output formats in PDF	YF
The solution supports generated output formats in PDF/A	YF
The solution supports generated output formats in DOCX	YF
The solution supports generated output formats in XLSX	YF
The solution supports generated output formats in PPTX	YF
The solution supports generated output formats in CSV	YF
The solution supports generated output formats in TXT	YF
The solution supports generated output formats in HTML	YF
The solution supports generated output formats in RTF	YF
The solution supports generated output formats in Printer Format	YF
Securing Documents	
The solution provides for the generation of fully protected documents (read-only or password protected editing)	YF
The solution provides for the generation of section based protected documents (parts are read only/password protected, parts are editable).	YF
The solution can generate DOCX and XLSX and PDF documents that contain sections with office / adobe developer controls (e.g. Checkboxes, Drop Down Values for end user to select, Datetime controls).	YF
The solution can generate DOCX documents and still have the e.g. Page numbering and layouting working as per initially designed in WORD TEMPLATISATION, even if user deletes/adds content from it.	YF
Data used as data exported XML	
The solution can support, the exporting of all data used in the document generated as an XML file	YF
Email delivery	
The solution can integrate with bank's SMTP server to send email	YF
Batch scheduling	
The solution supports scheduling of batch processing of documents (e.g for bulk customer statements)	YF
Integration	
The solution supports consumption of 3 rd party webservices for uploading generated documents in an Enterprise Document Management System?	AC
Repository	
The solution's portal provides for template folder organisation in a repository	YF
Versioning	
The solution supports template versioning	YF
The solution supports activation / inactivation of templates in the repository	YF
Workflow	

The solution support maker / checker approval workflow before a template become operational	NA
Changes	
The solution provides for an authorised business analyst (non-IT) to make change in a template that concerns content and make it productive without any IT support	YF
The solution provide for logging mechanism for designer, runtime and administrator activities? E.g. who, when changed what template	YF
The templates can be managed using Microsoft Visual Studio and TFS source control	YF
Technical	
Architecture	
Please provide a diagram of your solution components and explain each of the components and how they interact.	YF
The solution is based on SOA (Service Oriented Architecture), (b) the solution can participate in SOA	YF
The solution follows 3-tier (N-tier) architecture	YF
Framework	
The solution is based on J2EE framework	YF
The solution is based on .NET framework	YF
Server/Host Operating Systems	
The solution runs on the WIN 2012 o/s or above	YF
The solution runs on other OS as well (please specify other OS)	YF
Client Operating Systems	
WIN 7 is supported as client o/s of the solution	YF
WIN 8.1 & above is supported as client o/s of the solution	YF
WIN 10 & above is supported as client o/s of the solution	YF
Client Web Browser Compatibility	
In case of user's interface beeing browser-based, I.E. 11 & above compatibility exists	YF
In case of user's interface being browser-based, compatibility with other web browsers exists	YF
RDBMS	
Microsoft SQL Server 2016 or above is supported as RDBMS of the solution	YF
DB2 is supported as RDBMS of the solution	NA
ORACLE 12c is supported as RDBMS of the solution	NA
The only RDBMS supported by the solution is none of: SQL Server, DB2, Oracle	NA
Application Servers	
JBoss is supported as application server of the solution	NA
.NET is supported as application server of the solution	YF
Web/Portal Servers	
IIS is supported as web server of the solution	YF
Apache Tomcat is supported as web server of the solution	YF
Communication Protocols	
The TCP/IP protocol is supported	YF
User Interface	
Refer to the kind of technology that the presentation tier is based on (Fat Client, Rich (Smart) Client, Thin Client/Browser)	YF
The solution has a .NET client ("Windows Presentation Foundation" based e.g. Silverlight)	NA
The solution has a Java applets client	NA

ActiveX is mandatory for the solution's user interface	NA
Application Interoperability Protocols	
The solution supports the Web Services protocol for exposing its components to be invoked by external systems	YF
The solution's API is based on SOAP API	YF
The solution's API is based on REST API	AC
The only API supported by the solution is none of: SOAP and REST. (Please explain in comments)	NA
The solution supports the Web Services protocol for invoking components of external systems	YC
If you answer yes above, then in what IDE and programming language will this consumption be programmed with?	YF
Services and Support	
Training Material	
The solution provides training through Webinars	YF
The solution provides training through Video Tutorials	YF
The solution provides training through Tutor Led Training	YF
Documentation	
The solution provides document through Online Help Manual	YF
The solution provides document through Online Documentation	YF
Help Desk	
The vendor provides for Online Ticketing Portal accessible 24/7	YF
The vendor provides for email Submission for ticket management	YF
The vendor provides for assistance through phone	YF
Methodology	
Please explain your methodology for a document generation project and what is your involvement in the project	YF
Services	
Do you provide services for installing and configuring the proposed solution?	YF
Do you provide services for modifying or extending the proposed solution?	YF
Do you provide services for automating documents/reports within the proposed solution?	YF
Software Maintenance	
How are service packs distributed?	YF
Are upgrade services chargeable or are these included in the annual maintenance cost?	YF
Licensing	
Please state and explain in detail the licensing schemes you provide for each of the software components of your solution.	YF
Please state any 3 rd party technology you incorporate in your solution	NA