

Common questions	Answers
What is required to install and run Safyr?	<p>The Microsoft Windows PC on which Safyr is to be installed should have the following:</p> <ul style="list-style-type: none"> • A minimum of 8 Gigabytes of RAM • 100 Megabytes of hard disk space for the Safyr Software • Disk space of about 2GB for each Metadata Repository (each repository stores the metadata from 1 instance of a source system) • The appropriate client connectivity software (e.g., Oracle Net) for connection to the Safyr Repository database and (unless the ABAP based method is to be used for SAP) the Enterprise Application database. • FOR SAP: If Safyr is to be used with SAP or SAP BW and the user wants to have control of running the extractio of metadata from the SAP system, the SAP GUI client software needs to be installed on the PC, if the metadata is to be extracted from SAP via RFC/ABAP. (Note: The ABAP functions provided with Safyr can be run independently of the product. In this case, SAP GUI would not be required on the PC.)
What is a Safyr Repository and how much disk space is required?	<p>Metadata accessed from a single instance of a source application is used to populate a Safyr Repository.</p> <p>This contains a set of tables in a relational database where the various objects (e.g., tables, relationships, indexes...) are stored.</p> <p>The size of the repository will depend to some extent on the size of the source application. Therefore, an SAP S/4HANA or ECC source will require about 2GB of space. The other sources will need less.</p>
What databases can Safyr repositories be stored in?	<p>Safyr repositories can be stored in:</p> <ul style="list-style-type: none"> • SQLite (ships with Safyr at no cost. Single user only) • Oracle • SQLServer
Can I use Safyr in a cloud environment?	<p>Yes, Safyr can be installed on a Virtual Machine running Microsoft Windows in the cloud. Safyr can also access repositories stored in Oracle or SQLServer RDBMS hosted in the cloud.</p>

<p>What version of the source applications does Safyr support?</p>	<ul style="list-style-type: none"> • SAP Versions: SAP S/4HANA, ECC (see list of modules below), 3.1 • SAP MDG • SAP BW: 2.0 and above including SAP BW/4HANA • SAP SuccessFactors • Oracle eBusiness Suite: 11 and above. • Siebel Versions: 6.5 and above • J. D. Edwards EnterpriseOne Versions: Xe and above • PeopleSoft Versions: Enterprise 8.0 and above • Salesforce and Force based applications • Microsoft Dynamics 365 PLEASE NOTE: Safyr copies metadata from the Microsoft Dataverse. As of January 2021, Dynamics 365 Finance & Operations does not store metadata in the Dataverse • Microsoft Dynamics CRM 																																			
<p>Where is the metadata in the applications Safyr supports and what is the mechanism Safyr uses for connection and discovery?</p>	<table border="1"> <thead> <tr> <th data-bbox="846 762 1245 871">Source application</th> <th data-bbox="1245 762 1626 871">Location of useful metadata</th> <th data-bbox="1626 762 2054 871">Connectivity and discovery method</th> </tr> </thead> <tbody> <tr> <td data-bbox="846 871 1245 927">SAP (S/4HANA, ECC, MDG))</td> <td data-bbox="1245 871 1626 927">Data dictionary tables</td> <td data-bbox="1626 871 2054 927">SAP Transport ABAP</td> </tr> <tr> <td data-bbox="846 927 1245 983">SAP BW (all variants)</td> <td data-bbox="1245 927 1626 983">Data dictionary tables</td> <td data-bbox="1626 927 2054 983">SAP Transport ABAP</td> </tr> <tr> <td data-bbox="846 983 1245 1038">SAP SuccessFactors</td> <td data-bbox="1245 983 1626 1038">Data dictionary tables</td> <td data-bbox="1626 983 2054 1038">ODATA</td> </tr> <tr> <td data-bbox="846 1038 1245 1094">Oracle eBusiness Suite</td> <td data-bbox="1245 1038 1626 1094">Data dictionary tables</td> <td data-bbox="1626 1038 2054 1094">ODBC</td> </tr> <tr> <td data-bbox="846 1094 1245 1150">Siebel</td> <td data-bbox="1245 1094 1626 1150">Data dictionary tables</td> <td data-bbox="1626 1094 2054 1150">ODBC</td> </tr> <tr> <td data-bbox="846 1150 1245 1206">JD Edwards</td> <td data-bbox="1245 1150 1626 1206">Data dictionary tables</td> <td data-bbox="1626 1150 2054 1206">ODBC & XML files from JDE</td> </tr> <tr> <td data-bbox="846 1206 1245 1262">PeopleSoft</td> <td data-bbox="1245 1206 1626 1262">Data dictionary tables</td> <td data-bbox="1626 1206 2054 1262">ODBC</td> </tr> <tr> <td data-bbox="846 1262 1245 1318">Salesforce</td> <td data-bbox="1245 1262 1626 1318">Data dictionary tables</td> <td data-bbox="1626 1262 2054 1318">API</td> </tr> <tr> <td data-bbox="846 1318 1245 1374">Microsoft Dynamics 365</td> <td data-bbox="1245 1318 1626 1374">Dataverse (CDS)</td> <td data-bbox="1626 1318 2054 1374">API</td> </tr> <tr> <td data-bbox="846 1374 1245 1406">Microsoft Dynamics CRM</td> <td data-bbox="1245 1374 1626 1406">Data dictionary tables</td> <td data-bbox="1626 1374 2054 1406">ODBC</td> </tr> </tbody> </table>			Source application	Location of useful metadata	Connectivity and discovery method	SAP (S/4HANA, ECC, MDG))	Data dictionary tables	SAP Transport ABAP	SAP BW (all variants)	Data dictionary tables	SAP Transport ABAP	SAP SuccessFactors	Data dictionary tables	ODATA	Oracle eBusiness Suite	Data dictionary tables	ODBC	Siebel	Data dictionary tables	ODBC	JD Edwards	Data dictionary tables	ODBC & XML files from JDE	PeopleSoft	Data dictionary tables	ODBC	Salesforce	Data dictionary tables	API	Microsoft Dynamics 365	Dataverse (CDS)	API	Microsoft Dynamics CRM	Data dictionary tables	ODBC
Source application	Location of useful metadata	Connectivity and discovery method																																		
SAP (S/4HANA, ECC, MDG))	Data dictionary tables	SAP Transport ABAP																																		
SAP BW (all variants)	Data dictionary tables	SAP Transport ABAP																																		
SAP SuccessFactors	Data dictionary tables	ODATA																																		
Oracle eBusiness Suite	Data dictionary tables	ODBC																																		
Siebel	Data dictionary tables	ODBC																																		
JD Edwards	Data dictionary tables	ODBC & XML files from JDE																																		
PeopleSoft	Data dictionary tables	ODBC																																		
Salesforce	Data dictionary tables	API																																		
Microsoft Dynamics 365	Dataverse (CDS)	API																																		
Microsoft Dynamics CRM	Data dictionary tables	ODBC																																		



How does Safyr connect and discover metadata from SAP?

The preferred process for connecting to SAP applications (**SAP S/4HANA, ECC (Business Suite), SAP MDG, SAP BW/4HANA, BW on HANA, BW Classic**) and accessing their metadata is as follows:

- Install the Silwood supplied SAP Transport(s) on the target SAP system(s). These contain the ABAP programs needed for accessing and duplicating SAP metadata.
- Install Safyr on a Windows PC which also has the SAP GUI installed. Use the Safyr connection wizard to an RFC program which initiates the ABAP and copies the metadata from the SAP Data Dictionary tables into a Safyr Repository.

NOTE: Silwood’s SAP Transports are certified by SAP

For **SAP SuccessFactors**, Safyr uses an XML file of ODATA definitions produced by the customer to load the metadata into a Safyr repository

What SAP ECC modules does Safyr support?

Functional Modules	Industry specific modules (SAP IS)	Technical modules
SAP APO module	SAP IS Aerospace & Defense	SAP ABAP module
SAP CO module	SAP IS Automotive	SAP Basis module
SAP CRM module	SAP IS Banking	SAP BI module
SAP CS module	SAP IS Chemicals	SAP BPC module
SAP EC module	SAP IS Consumer Products	SAP BODI module
SAP EHS module	SAP IS Defense & Security	SAP EP module
SAP EWM module	SAP IS Engineering, Construction, & Operations	SAP GRC module
SAP FI module	SAP IS Healthcare	SAP MDM module
SAP FM module	SAP IS Higher Education & Research	SAP Netweaver module
SAP FSCM module	SAP IS High Tech	SAP Security module
SAP HR module:	SAP IS Industrial Machinery and Components	SAP Solution Manager module
SAP IM module	SAP IS Insurance	SAP XI module
SAP MM module:	SAP IS Life Sciences	SAP PI module
SAP PLM module	SAP IS Media	
SAP PM module	SAP IS Mill Products	
SAP PP module	SAP IS Mining	
SAP PS module	SAP IS Oil & Gas	
SAP QM module:	SAP IS Professional Services	
SAP RE module	SAP IS Pharma	
SAP SCM module	SAP IS Public Sector	
SAP SD module	SAP IS Retail	
SAP SEM module	SAP IS Telecommunications	
SAP SM module	SAP IS Transportation & Logistics	
SAP TR module:	SAP IS Utilities	

Safyr Summary Information



	SAP WM module	SAP IS Wholesale Distribution		
	SAP LO module			
	<p>Notes:</p> <ul style="list-style-type: none"> Safyr for SAP supports SAP applications from SAP 3.1 and above If you are asked about a module not included in the table above, please refer the question to us. Technical modules - please note the metadata accessed from these modules is restricted to data structures not process information. 			
Which version of SAP S/4HANA does Safyr support?	Safyr supports all versions of SAP S/4HANA			
Which SAP BW products does Safyr support?	<p>Safyr supports the following:</p> <ul style="list-style-type: none"> SAP BW/4HANA SAP BW on HANA SAP BW Classic 			
What metadata does Safyr access from SAP BW?	BW OBJECTS ACCESSED BY SAFYR	SAP BW CLASSIC	SAP BW ON HANA	SAP BW/4HANA
	InfoObjects	Yes	Yes	Yes
	InfoCubes (& Multi-providers)	Yes	Yes	Not applicable
	DSO's	Yes	Yes	Not applicable
	DataSources	Yes	Yes	Yes
	InfoSources	Yes	Yes	Yes
	OpenHub Destinations	Yes	Yes	Yes
	Aggregation Levels	Yes	Yes	Yes
	BW Queries	Yes	Yes	Yes
	ADSO's	Not applicable	Yes	Yes
	OpenODS Views	Not applicable	Yes	Yes
	HANA Composite Providers	Not applicable	Yes	Yes
	HANA Calculation Views	Not applicable	Yes	Yes

<p>How does Safyr connect and copy metadata from Salesforce?</p>	<p>Safyr copies the metadata from Salesforce using the Salesforce Enterprise WSDL API.</p> <p>Details of how to connect to the Salesforce system are required in order to make the connection and duplicate the metadata when using the Safyr connection wizard.</p>
<p>How does Safyr connect and copy metadata from SAP SuccessFactors</p>	<p>Safyr uses an XML file containing ODATA definitions of SuccessFactors data structures to populate the repository. This file is generated from the SuccessFactors system before the provision of metadata into Safyr.</p>
<p>How does Safyr connect and copy metadata from Microsoft Dynamics 365 (Microsoft Dataverse)</p>	<p>Safyr uses a third-party solution that utilises an API connection to the Microsoft Dataverse to access the metadata. This metadata is automatically stored in a staging area before being loaded into a Safyr repository.</p> <p>Dataverse stores both the metadata and data for Dynamics 365 CE and PowerApps based applications in the cloud. It does not store the metadata from Dynamics 365 F&O</p>
<p>How does Safyr connect and copy metadata from Microsoft Dynamics CRM?</p>	<p>If the source is an on-premise Dynamics CRM system, then it is necessary to configure a connection to the application database in order to copy its metadata from the data dictionary tables.</p> <p>This is achieved using Microsoft ADO (ActiveX Data Objects).</p> <p>Appropriate security access to the database is required.</p>
<p>How does Safyr connect and copy metadata from JD Edwards?</p>	<p>Accessing metadata from JD Edwards requires an extra step compared to the methods used for other Oracle applications. This is because of the way the JD Edwards metadata is located and structured.</p> <p>It is necessary to configure a connection to the EnterpriseOne database where the required metadata is stored.</p> <p>Safyr copies the metadata from a small set of tables in this database and a group of XML files that are generated by a process in the EnterpriseOne application. These files must be generated before attempting the duplication of metadata from the EnterpriseOne system.</p> <p>The connection to the JD Edwards EnterpriseOne database is achieved using Microsoft ADO (ActiveX Data Objects).</p>

<p>How does Safyr connect and copy metadata from Siebel</p>	<p>If the metadata source application is Siebel, then it is necessary to configure a connection to the application database in order to copy its metadata from the data dictionary tables.</p> <p>This is achieved using Microsoft ADO (ActiveX Data Objects).</p> <p>Appropriate security access to the database is required.</p>
<p>How does Safyr connect and copy metadata from Oracle eBusiness Suite?</p>	<p>If the source is Oracle eBusiness Suite it is necessary to configure a connection to the application database in order to copy its metadata from the data dictionary tables.</p> <p>This is achieved using Microsoft ADO (ActiveX Data Objects).</p> <p>Appropriate security access to the database is required.</p>
<p>How does Safyr connect and copy metadata from PeopleSoft?</p>	<p>If the source application is a PeopleSoft system it is necessary to configure a connection to the PeopleSoft application database data dictionary tables where the required metadata is stored.</p> <p>This is achieved using Microsoft ADO (ActiveX Data Objects).</p> <p>Appropriate security access to the database is required.</p>
<p>Is it possible to automate Safyr processes?</p>	<p>Safyr can be configured to perform many of the day-to-day tasks required of the product without the user having to be present and (if desired) as a scheduled process.</p> <p>Three types of Tasks can be automated:</p> <ol style="list-style-type: none"> 1. Access and discovery of metadata from the source application (SAP, Salesforce, PeopleSoft...) 2. Creation and Expansion of Subject Areas 3. Export of Subject Areas (not all export formats supported) <p>More information is available here</p>
<p>What metadata does Safyr discover from Source applications?</p>	<p>Safyr accesses:</p> <ul style="list-style-type: none"> • Custom objects (Tables, fields etc). • Programs and components (SAP only) • Technical names for database tables and fields (attributes) • Descriptive names for database tables and fields (attributes) • Long descriptions for tables and fields (where available)

	<ul style="list-style-type: none"> • Table and field information • Views (where available) • Table row count (where available) • Names in multiple languages (Only supported by SAP) <p>Safyr discovers:</p> <ul style="list-style-type: none"> • Primary and Foreign Keys • Table relationships • Application module hierarchy (where available)
<p>How does Safyr create application hierarchies from metadata discovered from the source applications?</p>	<p>The Application Hierarchies shown in Safyr will vary depending on the Application Type. In each case, the Hierarchy is based upon the metadata extracted and is never a 'pre-configured' structure delivered by Silwood.</p>
<p>What is a Safyr Subject Area and how do I create them?</p>	<p>A Safyr Subject Area is any user defined collection of tables from an instance of the source application. This grouping usually contains some or all of the related tables.</p> <p>A Subject Area can contain as many tables as needed for the project which is being worked on.</p> <p>It is common for a Subject Area to contain the tables and related tables which relate to a specific business concept or artefact. For example, Customer Master, Account, Product Master, Bill of Materials, Accounts Payable etc.</p> <p>In addition, Safyr can be used to group together tables and attributes which represent Personal or PII data and are useful in the context of meeting CCPA, GDPR and other regulatory requirements.</p> <p>Finally, Subject Areas can be reused between different instances of the same application course. This makes it possible to compare complete or partial instances of a source application.</p> <p>Safyr Subject Areas are used to populate or provision other products and tools with metadata via Safyr's Subject Area Export facilities.</p>
<p>How can Safyr be used to find Personal Data or PII for UK Data Protection Act, GDPR, CCPA, or other personal data regulations?</p>	<p>Safyr's Advanced functions can be used to search for Attributes (Columns) in Tables which contain the text strings which are relevant for Personal Data Discovery for GDPR, CCPA and other regulatory regimes.</p> <p>The results show which table or tables hold those Personal Data attributes.</p>

	<p>Results can be saved as Safyr Subject Areas and exported to other tools and in other formats. It is also possible to combine all the Personal Data Subject Areas into a single consolidated Subject Area.</p> <p>Silwood also provide some pre-configured GDPR/CCPA Subject Areas.</p>
<p>What are the Safyr export formats?</p>	<p>Safyr Subject Areas can be exported to:</p> <ul style="list-style-type: none"> • Safyr’s ER Diagrammer • Safyr Metadata Reporting (Microsoft Excel format) • Safyr Compare (Compares whole or partial sets of metadata from two instances of the same source application) • Safyr JSON (Premium Export) (used by Alation, Solidatus, Actian and other data catalog vendors) • Safyr Metadata Dictionary • Collibra DGC (Premium Export) • Comma Separated Variable (CSV) • Extensible Mark-up Language (XML) • Informatica EDC (Premium Export) • Erwin Data Modeler • ER/Studio • SAP PowerDesigner • IBM Infosphere Data Architect • System Architect
<p>What are the advantages of using Safyr’s export to JSON format?</p>	<p>Safyr’s JSON export formats have two main advantages:</p> <ol style="list-style-type: none"> 1. Supports the loading of larger quantities of metadata (e.g., thousands of tables and attributes or even complete SAP BW systems) very quickly. 2. To provision the internal connectivity or data lineage between SAP BW objects into a data catalog, lineage or other application.
<p>How is Safyr configured for multiple users?</p>	<p>To achieve this, we recommend that Safyr should be implemented in client / server configuration. This means that the RDBMS which will store the Safyr repositories should be installed on a separate server to which each Safyr user has a connection.</p>

	<p>Safyr needs a separate database or schema for each set of metadata to be stored. Each database will require a database user to be specified who must also be the Table Owner for the database.</p> <p>Each Safyr user wishing to share the metadata in a Safyr repository must specify the same database (or schema) and database user when defining a new Safyr repository within their local Safyr environment.</p> <p>Both Safyr Extractor/Browser licences and Safyr Browser only licences can access the Safyr repositories if required.</p>
<p>How long does it take to duplicate metadata from application sources?</p>	<p>This depends on two main factors.</p> <p>Firstly, the number of tables and attributes that are contained in the source application.</p> <p>Secondly the speed of the network across which the metadata is to be transferred.</p> <p>Under normal circumstances Silwood anticipate that it will take between 60 and 90 minutes to populate a Safyr repository with the metadata from an SAP system. A Salesforce application would be much quicker, perhaps 5 to 10 minutes only.</p>
<p>Do Silwood offer a Safyr training course?</p>	<p>Silwood offer two training courses for Safyr. These are usually delivered over the internet using web conferencing facilities.</p> <ol style="list-style-type: none"> 1. Fast track Safyr training – up to 2 delegates This is a ½ day course designed to enable end users who do not need to know how to install and connect to source applications to get to know Safyr’s browsing and export capabilities. 2. Web based training (Safyr) for up to 8 delegates This is a one-day course normally delivered over 2 or 3 discreet sessions. It includes topics such as: <ol style="list-style-type: none"> a. Product installation b. Creating database schema for Safyr repositories c. Connecting to the application source(s) d. Duplicating metadata e. Repository management f. Use of Safyr for metadata exploration, sub setting and export
<p>What other technical or staff resources might be needed to implement Safyr?</p>	<p>Most of the work to implement Safyr can be done by the end user (usually a data architect, analyst, scientist or modeler).</p>

Safyr Summary Information



	<p>It may be necessary to have some technical assistance with setting up a database server for the Safyr repositories or gaining access rights to the data dictionary tables in the source application.</p> <p>For SAP source applications it is common for the SAP BASIS team to install the Silwood Safyr SAP Transports. This is not a challenging or time-consuming task; it is merely something over which the SAP team often prefers to maintain control.</p> <p>All Safyr User documentation is available here</p>
--	---

For more information:

Visit: <https://www.silwoodtechnology.com>

Call: +44 (0)1344 876553

Email: info@silwoodtechnology.com