

Value proposition of using USB4SAP plug-in for Microsoft ADF

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Context

1. Upon request from a customer, we were asked to prepare a brief on using USB4SAP plug-in for
 - Microsoft Azure Data Factory (ADF)
 - SAP BTP
2. Customer is a global manufacturer with plants in 17 countries
3. They planned to extract SAP ERP data (incl SAP TCODE MB51, Z-reports) & BW reports to Azure datalake / Databricks for analytics & AI

Approach

1. Comparison was done using SAP TCODE MB51, with report variant
2. SQL trace in SAP recorded total 212 DB table accesses (see screenshot)
3. Since ADF & BTP extract underlying tables only, estimate was done for extracting 10% of tables for comparison
4. USB4SAP is a no-code API based plug-in Certified by SAP & Microsoft (appendix -1)
5. Standard ADF & BTP support full tables extraction
6. ADLS was used as the destination

System = ED1 Release = 750 DB-System = SAP DB 11.00.3393 12/16/2023 18:46:11

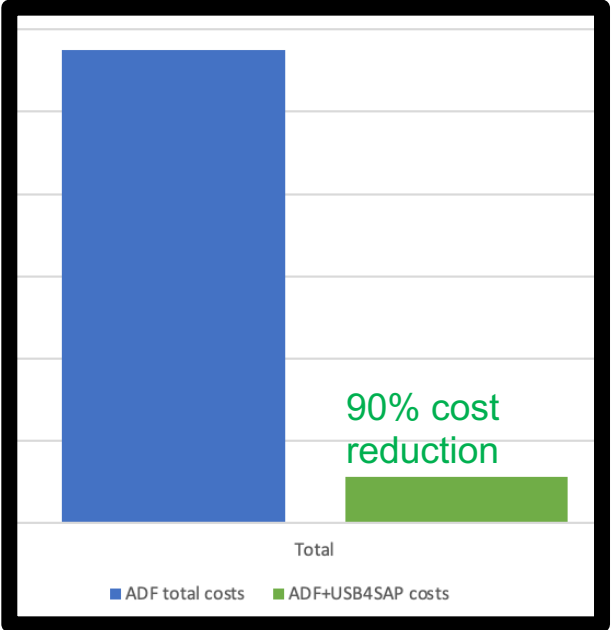
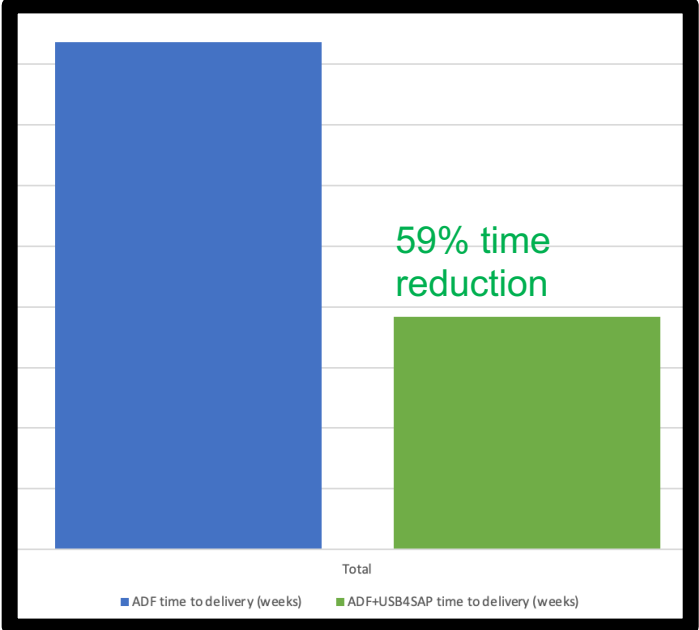
Note
SQL Trace Contains:
212 OPEN operations
Consider rerecording the trace.
Before doing so, execute the application several times.

Start of Trace Period	Date : 12/16/2023	Time : 18:30:47,000
End of Trace Period	Date : 12/16/2023	Time : 18:31:07,999
Time Interval :		20.999s
Start of First Trace Record	Date : 12/16/2023	Time : 18:30:47,273
End of Last Trace Record	Date : 12/16/2023	Time : 18:31:02,137
Time Interval :		14.864s

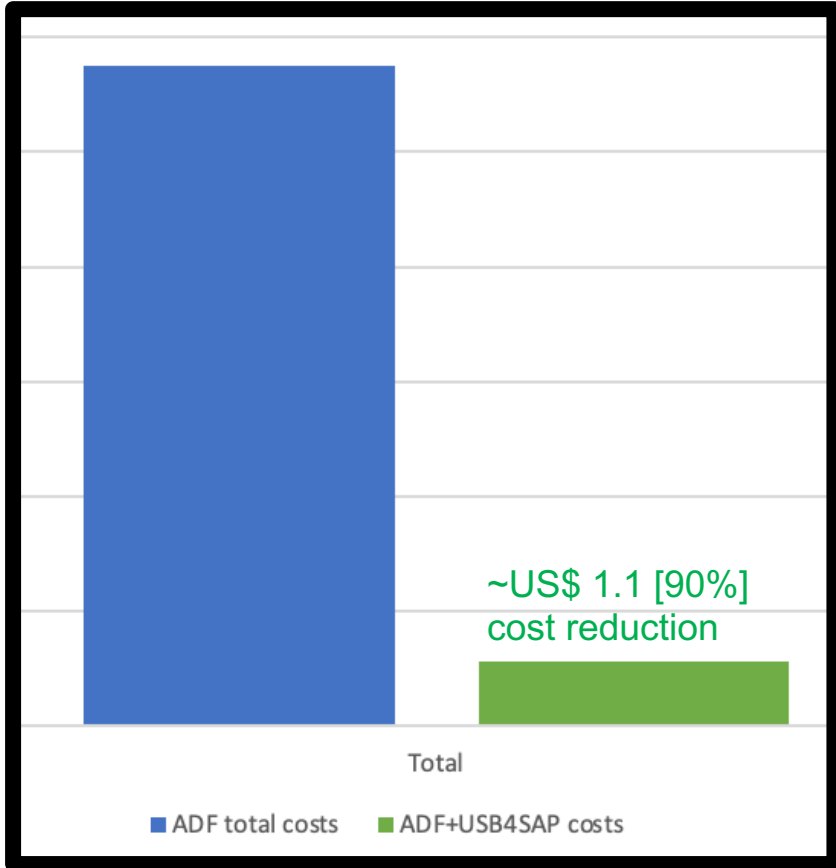
	Executions	Duration	Records
Total	222 (100.0%)	0.308s (100.0%)	216
SQL (DB Accesses)	222 (100.0%)	0.308s (100.0%)	216
SELECT	212 (95.5%)	0.298s (99.1%)	215
INSERT	1 (0.5%)	0.001s (0.3%)	1
COMMIT	8 (3.6%)	0.002s (0.6%)	0
Other	1 (0.5%)	0.000s (0.0%)	0

SQL trace for SAP MB51

Summary of findings

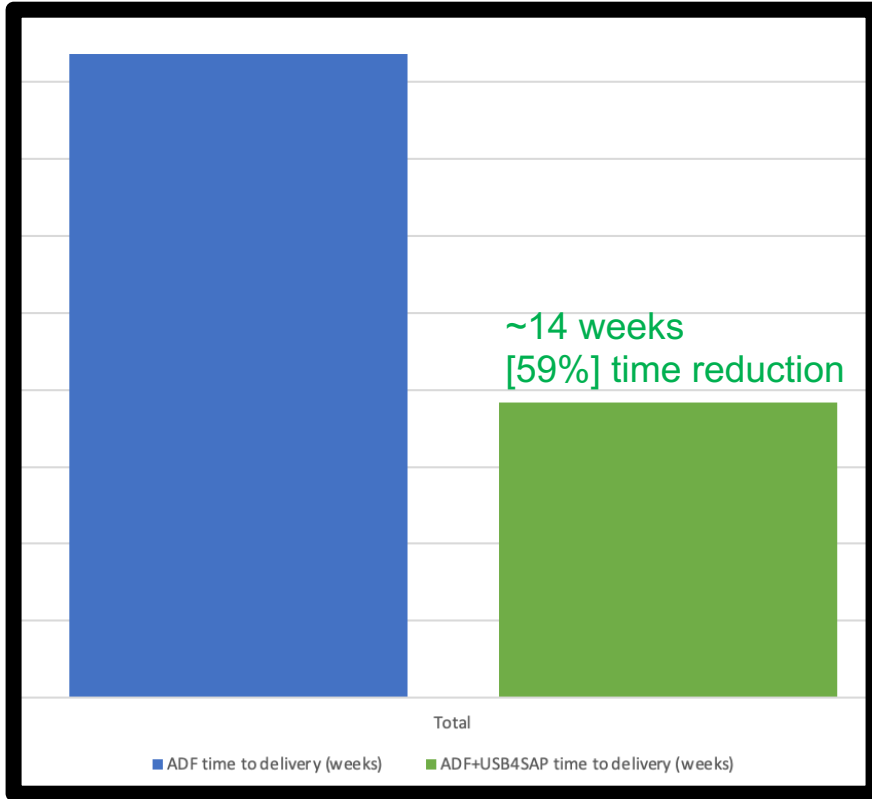
Component	Cost impact (in US\$)	Time impact (in weeks)												
ADF+ USB4SAP	 <p>A bar chart comparing 'ADF total costs' (blue bar) and 'ADF+USB4SAP costs' (green bar). The blue bar is significantly taller than the green bar. A green text label '90% cost reduction' is placed between the bars. The x-axis is labeled 'Total' and the legend at the bottom identifies the blue bar as 'ADF total costs' and the green bar as 'ADF+USB4SAP costs'.</p> <table border="1"><thead><tr><th>Category</th><th>Cost (US\$)</th></tr></thead><tbody><tr><td>ADF total costs</td><td>US\$1,149K</td></tr><tr><td>ADF+USB4SAP costs</td><td>US\$112K</td></tr></tbody></table>	Category	Cost (US\$)	ADF total costs	US\$1,149K	ADF+USB4SAP costs	US\$112K	 <p>A bar chart comparing 'ADF time to delivery (weeks)' (blue bar) and 'ADF+USB4SAP time to delivery (weeks)' (green bar). The blue bar is significantly taller than the green bar. A green text label '59% time reduction' is placed between the bars. The x-axis is labeled 'Total' and the legend at the bottom identifies the blue bar as 'ADF time to delivery (weeks)' and the green bar as 'ADF+USB4SAP time to delivery (weeks)'.</p> <table border="1"><thead><tr><th>Category</th><th>Time (weeks)</th></tr></thead><tbody><tr><td>ADF time to delivery (weeks)</td><td>21 weeks</td></tr><tr><td>ADF+USB4SAP time to delivery (weeks)</td><td>11 weeks</td></tr></tbody></table>	Category	Time (weeks)	ADF time to delivery (weeks)	21 weeks	ADF+USB4SAP time to delivery (weeks)	11 weeks
Category	Cost (US\$)													
ADF total costs	US\$1,149K													
ADF+USB4SAP costs	US\$112K													
Category	Time (weeks)													
ADF time to delivery (weeks)	21 weeks													
ADF+USB4SAP time to delivery (weeks)	11 weeks													
Summary	<ul style="list-style-type: none">• Total cost changed from US\$1,149K to US\$112K• SAP tables Change Data Capture (CDC)	<ul style="list-style-type: none">• Setup time changed 21 weeks to 11 weeks• No-code extraction of SAP modeled data												

Options comparison for 5 TCODES/ 100 tables [~\$1.1m saving]



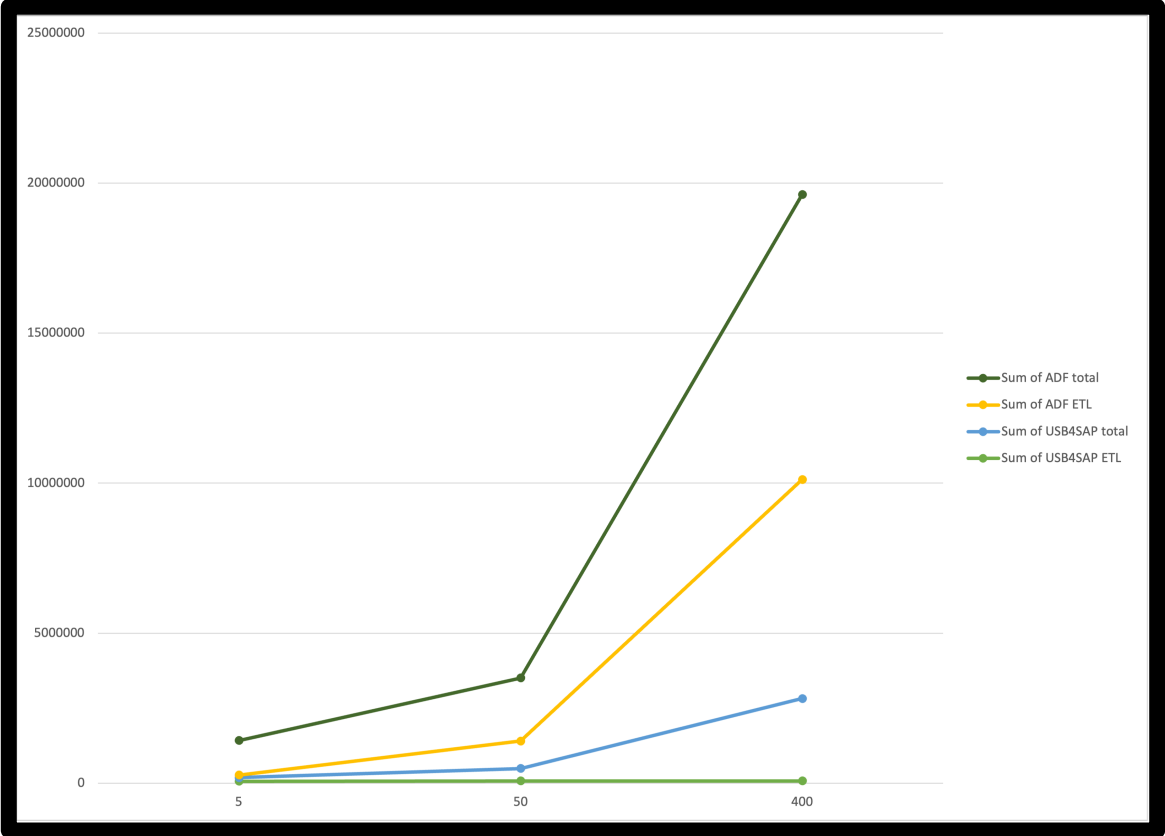
Phase	Total ADF costs	Total ADF+USB4SAP	\$Cost Saving	%Cost Saving
1-Plan	1,920	640	1280	67%
2-Setup	1,664	576	1088	65%
3-Build	974,368	704	973664	100%
4-Golive & hypercare	6,566	2,560	4006	61%
5-Operations	165,111	107,613	57498	35%
Total	1,149,630	112,093	1,037,537	90%

Comparison for 5 TCODES/ 100 tables – time saving

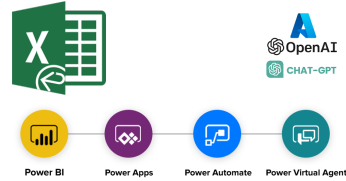


Phase	ADF Time (weeks)	ADF+USB4SAP Time (weeks)	Time Saving (weeks)	Time Saving (%)
1-Plan	4	2	2	50.00%
2-Setup	6	2	7	80.00%
3-Build	7	2	5	73.13%
4-Golive & hypercare	4	4	0	0.00%
Grand Total	21	10	14	59%

Cost scaling with # of SAP Objects



USB4SAP with Microsoft Azure/ Power Platform

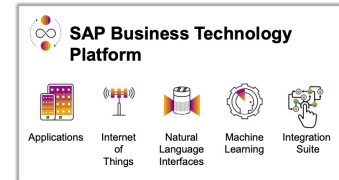
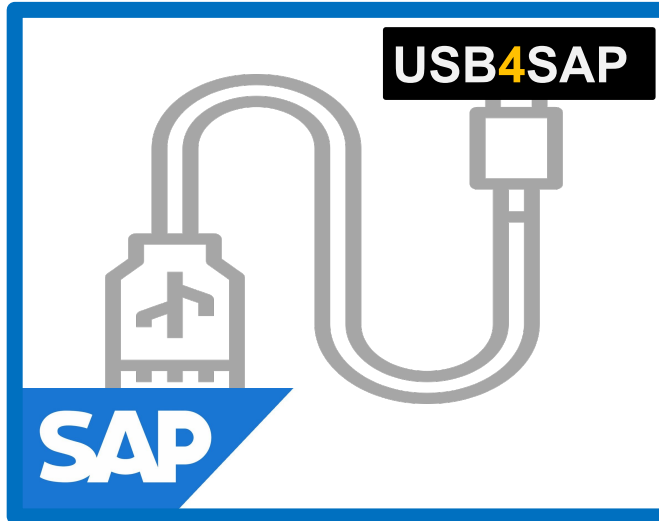


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Higher [Return on Information]

Appendix1- USB4SAP

SAP® Certified
Integration with SAP NetWeaver®

No-code API for analytics, automation and AI with SAP

1.3 M+
models

850K+
tables

450K+
reports

1

Simple
API

1. Full & delta SAP data to any datalake, datawarehouse or application
2. Self-service, business ready in PowerBI, Power Platform and AI/GenAI
3. SAP native security, zero-infra and live

