Solution Building Blocks (SBB) – Example Style Guide

Business Application SBB definition

Business Applications are software systems that generate/process/consume business data in support of business tasks, processes, or aspects of an organization's business model. In the vast majority of cases, they have well used UIs users associated with them and are marketed as purchasable products / services by 3rd parties.

Examples of Business Applications would include: Workday, Confluence, Zoom, AutoCAD, Salesforce, Maconomy, SuccessFactors, MS Dynamics, SAP Analytic Cloud; EntraID.

IT Component SBB definition

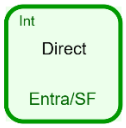
IT Components represent the technologies (software / hardware / 3rd party technology services) that must be deployed for a Business Application to function as intended. An IT Component can represent either:

1. A single type of technology e.g. Azure load balancers, Barracuda firewall
2. A combination of technologies e.g. Mott MacDonald Integration Hub (combines Azure SQL service; Azure Key vault; Azure VM; Windows Server OS; Windows PowerShell).

Interface SBB definition

An Interface is simply defined as a connection between Business Applications. This ‘logical’ rather than ‘technical’ approach means that the Interface provides a clear, and conceptual place to describe the methods, protocols and patterns used to support business data flow between Business Applications.

Three example Interface SBBs are shown below namely the Concur/SuccessFactors, Maconomy/ SuccessFactors and EntraID/SuccessFactors interfaces. Note that in these cases the supporting text is used to call out the key technologies (IT components) that implement the interface.



Data SBB definition

Data SBBs provide an abstract view of the data that is created, read, updated and deleted (CRUD) by Business Applications and exchanged over Interfaces.

Data SBBs can be thought of as having several attributes associated with them such as data classification (Non-Business; MM Public; MM General; MM Restricted; MM Confidential) and whether or not the data is considered to contain personally identifiable information (PII). These SBBs have an important role to play when considering the data lifecycle.

The examples below show that these SBBs do not identify individual data fields, rather are used to call out general sets of data the exact contents of which can be defined elsewhere.

General SBB definition

The General SBB is provided to allow any other type of building block the architect wishes to include in the view. As the examples below show, these can include entities such as a geographic location, a specific part of the organisation or a business process

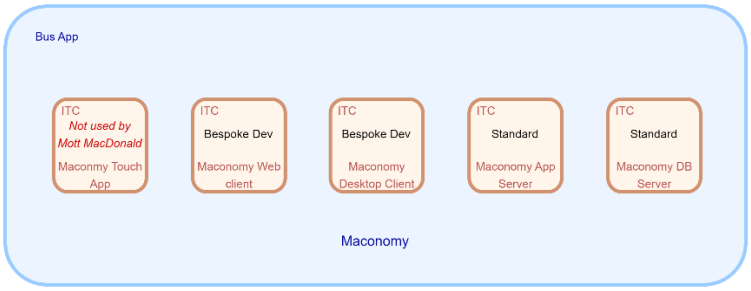
Connectors

Only two sub-types of Connector exist, both are represented by a single line that passes between 2 SBBs

Associations

An Association is usually represented on the drawing canvas as a single black line (example shown below) and is simply used to indicate that 2 SBBs have an important relationship that should be discussed.

Occasionally it is useful to indicate that the same type of association exists between multiple SBBs. To that end it is acceptable to place one or more SBBs inside another on the drawing canvas. The example below shows that an association exist between the Maconomy Business Application and each of the 'contained' IT Components i.e. 5 associations in total.

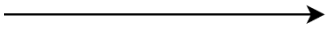


There are two particularly important aspects of associations that should be noted :

- that these associations are instances of the predefined relationships found in the architectural meta-model.
- If associations are not shown between SBBs this does not mean that they don't exist. It could mean merely that the author doesn't want to highlight these associations.

Dataflows

A Dataflow is shown on the drawing canvas simply as a line with one or two arrow heads indicating that data flows between 2 SBBs



Supporting text

Supporting text is simply additional text placed on the view to assist understanding. There is no restriction placed on the supporting text that can be used by the view author.

Solution users

It is encouraged that views indicate which SBBs are directly interacted with by solution users. Doing so often provides important context for any stakeholder attempting to understand the view.

Solution users are represented on the drawing canvas by an out of the box draw.io icon shown below. The icon should be labelled with the role being undertaken. However, the view author must be careful not to exclude solution users when choosing this role name. If in doubt, select a more generic role name for the solution user such as 'Employee'.