

2.5 Create or update a simulation workspace

To start, create a new workspace (see **1** in Figure 25 or open an existing one (**2**)).

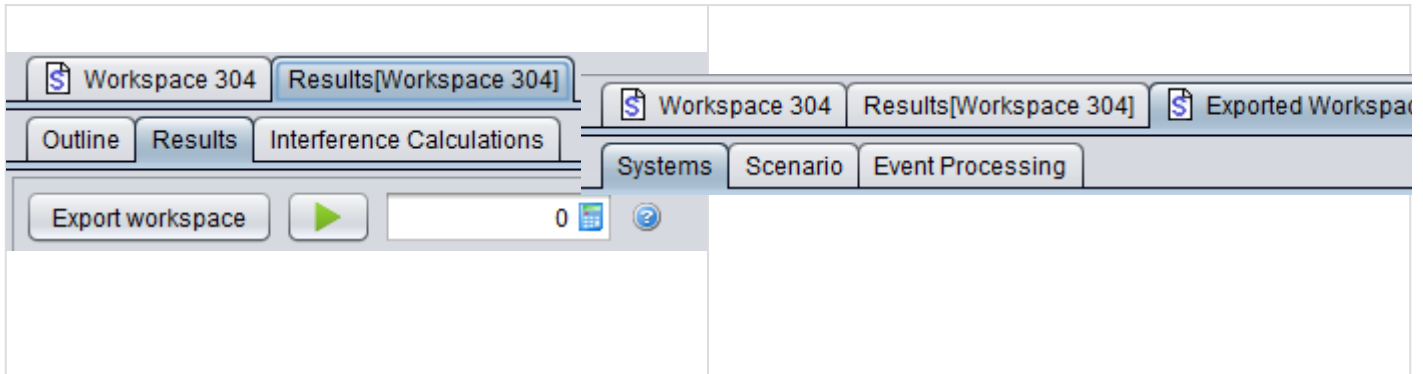


Figure 26: Illustration of how to create or open a workspace

A simulation scenario is a part of a scenario workspace, which defines all technical parameters of modeled links as well as some related modelling assumptions, such as physical (mutual) placement of transceivers, propagation modelling settings and so on. Within SEAMCAT a simulation scenario is based upon the concept of links. A link stands for a pairing of one transmitter with one receiver^[1] operating together in a given wireless system. Such a link is also called a “system link”.

When a new workspace is created, all of its scenario elements are populated with default values (representing a hypothetical interference case between two systems at 900 MHz, as shown in Figure 27). Therefore after creating a new workspace the first step should be to review and modify the scenario parameters so that the resulting simulation scenario reflects the configuration of the wireless systems to be simulated.

To create or update a simulation workspace, the following steps need to be followed:

1. Set the technical characteristic of the various systems that you want to investigate. In the example of Figure 26 the first system is Generic and the second one is an OFDMA UL system. Do not forget to export the systems used to the library environment so that they can be reused at a latter point of time.

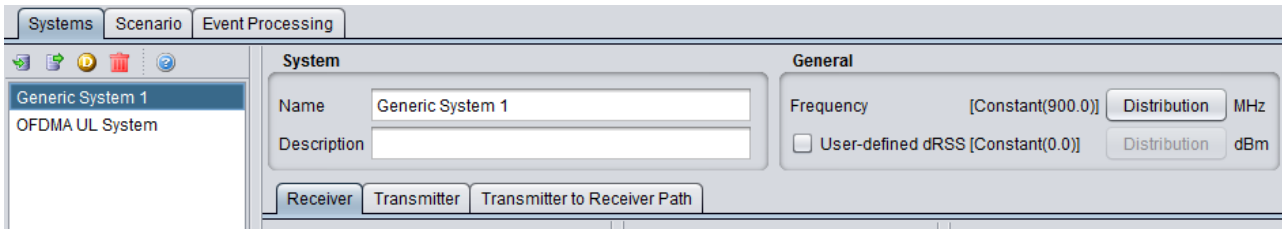


Figure 27: Setting various systems (import/export to library environment)

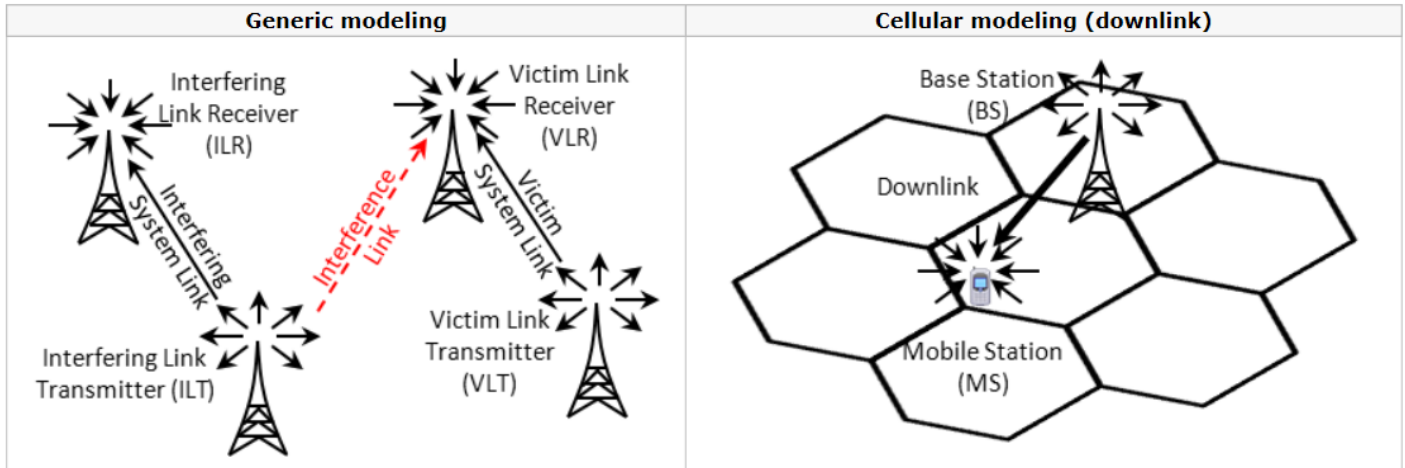


Figure 28: Overview of the various systems which can be simulated in SEAMCAT (i.e. Generic and cellular)

2. Set the scenario (see section 10);
3. Set the path characteristics between the victim and the interferer (relative position, interferer's density, path loss correlation and propagation model). Links can also be added, duplicated, etc...;
4. The number of events to simulate can be set in the simulation control panel. It is also possible to choose whether to run a simulation in the debug mode or not;
5. Having reviewed the scenario, the simulation can be run.

[\[1\]](#) Cellular systems with multiple receivers (downlink) or multiple transmitters (uplink) are handled differently