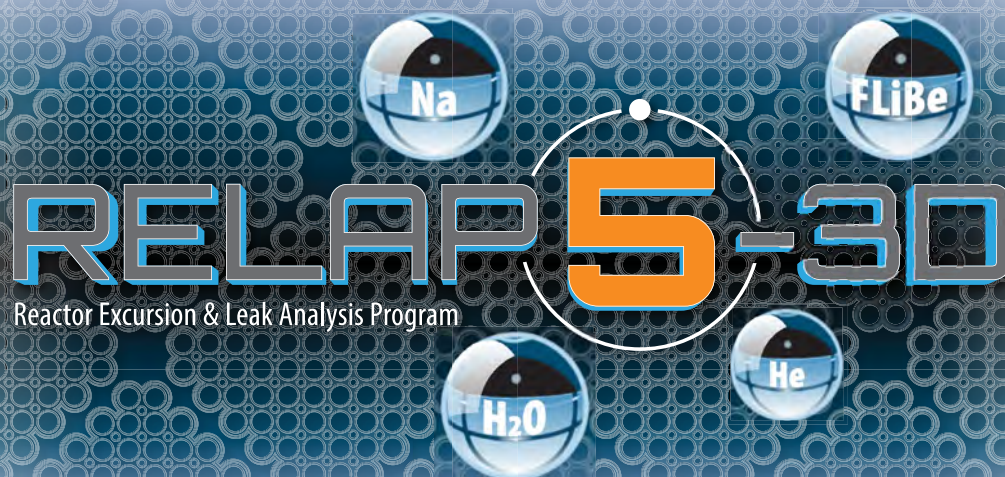




RELAP5-3D ACCESS LEVELS

RELAP5-3D is the nuclear industry's premiere thermal hydraulics code for modeling the entire reactor system (i.e., reactor core, primary cooling system and secondary coolant loops) for every type of nuclear reactor, including light water, heavy water, molten salt, liquid metal, and high-temperature gas reactors. RELAP5-3D is used across the world by industry, academia and other national laboratories. Software access is divided into four levels.

LEVEL 1

Remote Executable Access

Remote executable access means that the code is accessed through the Idaho National Laboratory (INL) High Performance Computing (HPC) platform. The input decks, property files, etc., are stored

within the INL HPC systems and are only visible to the user. INL HPC benefits include multi-CPU access, large system memory, high speed computations, plot making, image rendering, data analysis, etc.

LEVEL 2

Local Executable Access

Local executable access means that the RELAP5-3D executable is sent to the designated organizational license point of contact (LPOC) to install on a local network. The LPOC is then responsible to grant

access to the executable to individuals who are approved for Level 2 access. Although an organization may be granted Level 2 access, if a user within the organization is approved for Level 1, that person may only access the code via the INL HPC system. Level 2 users may also access the code via the HPC.

Though use of the code via the HPC has many benefits, potential latency issues and occasional HPC outages can result in interruption of service; therefore, organizations may request a local executable.

LEVEL 3

Limited Developer Access

Limited developer access grants an approved user a subset of RELAP5-3D source code on the INL HPC. The files may be examined, modified, compiled, and tested. An INL shell script is used to build the full

code with the modified files replacing the originals and the new executable can be run to compare against the performance of the original executable code.

LEVEL 4

Source Code Access

Source code is the highest level of RELAP5-3D access. Organizations with source code access can modify the code to their needs and generate their own RELAP executable instead of INL providing the executable. However, individual users within the organization must also be approved for Level 4 access. Organizational users that are approved for Level 1 or 2 are not authorized to use the source code but may only access the code via the INL HPC or local executable.

For additional information contact

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RELAP5-3D Website link: <https://inl.gov/relap53d/>