RRC Robotica

RRC Robotica Submarina is a Brazilian company that specializes in deep-sea exploration work, as well as training personnel and customers on deep-sea exploration at their Deep Water Education Center. A component of this training is the use of Remotely Operated Vehicles (ROVs) by their commercial and military customers. To continually provide their customers with the best possible training, RRC Robotica needed a method of training their personnel on routine maintenance procedures on their fleet of deep sea ROVs.

"RRC Robotica is delighted with the new SIMA software developed and customized by DiSTI to RRC Robotica. [The] RRC initiative having our maintenance system supported by interactive 3D software such as SIMA is unique worldwide. I am sure our clients will perceive all the benefits including: innovation, professionalism, reduction of human mistakes and maintenance time throughout the years," said José Ramos Duarte Jr., Director President of RRC Robotica Submarina.

With the procurement of several new ROV systems from Schilling Robotics, RRC contracted DiSTI's professional services team to provide a virtual maintenance system called "Sistema de Manutenção Avançada" (SIMA), Portuguese for "Advanced System Maintenance." The virtual maintenance trainer provides RRC with an enhanced and cost effective method for training ROV personnel on pre and post operation checks and routine maintenance procedures in a comprehensive easily accessible application prior to live hands-on experience.

DiSTI's professional services team used a combination of GL Studio® and Replic8™ to develop the ROV maintenance training application. GL Studio provided accurate emulations of the intricate user interface of the ROV's control station. Replic8 provided the out of the box interactive 3D lesson framework for rendering and controlling the components of the virtualized ROV.

"RRC Robotica wanted a maintenance training system that could be used whenever the ROVs deploy onboard ship to enable maintenance technicians to train during downtime. Our solution was to install the maintenance training courseware on a computer in the ROV containers that control the actual ROV mission," said Chris Giordano, Director of Global Sales at DiSTI.