

## **GIS INTEGRO - A HIGH-EFFECTIVE TOOL FOR CREATING NATURE USE APPLICATIONS**

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Presently, an urgent problem has arisen of designing a software allowing to construct automated technologies for solving diverse nature management problems. Available software systems are not focused at solution of nature management problems. So, designing any sophisticated extensions meets considerable difficulties. Besides, these systems are mostly targeted for workstations which are in a limited use in Russia. That is why a specialized GIS INTEGRO was developed in our institute. This PC-based software offers standard GIS-functions and structurally is a geoinformation environment where diverse nature management computing and analytical applications operate. This system provides diverse interfaces allowing to change data presentations (raster or vector, regular or irregular grids, etc.). It includes applied modules providing such functions as minerals prediction, generalization of geological maps, transformation and registration of raster images, etc. The variety of problems arising in the nature management and diversity of data call for an easily extensible system. The system's modules designed by different teams should operate both independently and in combination with each other. These modules should follow common structure concepts and have a unified information data base. Primarily the system's configuration included geoinformation and prediction modules. Yet, later the solution of specific nature management problems called for extension of the system. The efficiency of such extension in particular applications has supported the strategy we follow in designing the system structure.