

The present work studies methods of scheduling in heterogeneous distributed systems. First there are introduced some theoretical basics which contain not only the scheduling theory itself but also the graph theory and the computational complexity theory. After that, compile-time scheduling methods and some well-known algorithms solving the problem are presented, followed by real-time scheduling basics and by classification of used methods. In the main part of the work there are proposed algorithms which respect additional restrictions. These algorithms are tested via the enclosed application and compared either to each other or to another algorithms which mostly don't respect additional restrictions. The mentioned application and the documentation for this application are a part of this work as well.