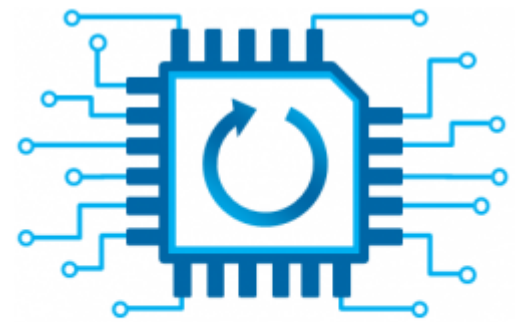


Real-Time Android



RTAndroid

RTAndroid platform makes real-time Android possible. With its ability to serve real-time requests, RTAndroid enlarges the field of application of mobile Android devices to time-critical domains. They could be used for in-field monitoring in industrial plants or as an integrated automation platform. This project evaluates the applicability of a RTAndroid-based solution in scenarios typical for programmable logic controllers (PLCs). Continuous improvements in the portability, usability and computational power of modern tablet PCs allow the development of new environments for working with PLC-common programming languages. Given the fundamental real-time support, RTAndroid can be used as a platform for an all-in-one solution including development, simulation and execution of typical PLC programs, as well as the communication to external hardware.

Details

More information about the project can be found here: [Real-Time Android](#)

Contacts

[Dr. rer. nat. Igor Kalkov](#)
[David Thönnessen, M.Sc. RWTH](#)

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[Kal17]

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@phdthesis { Kal17,  
  author = { Kalkov, Igor },  
  othercontributors = { Kowalewski, Stefan and A{\ss}mann, Uwe },  
  title = { A real-time capable, open-source-based platform for  
    off-the-shelf embedded devices },  
  publisher = { RWTH Aachen University, Department of Computer  
Science },  
  school = { RWTH Aachen University },  
  pages = { 1 Online-Ressource (xx, 114 Seiten) : Illustrationen,  
    Diagramme },  
  series = { Aachener Informatik-Berichte },  
  year = { 2017 },  
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@inproceedings { KGK17,  
  author = { Kalkov, Igor and Gurghian, Alexandru and Kowalewski,  
Stefan },  
  title = { Explicit prioritization of parallel Intent broadcasts in  
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    Real-Time and Embedded systems, Niagara Falls, NY (USA),
    2014-10-13 - 2014-10-14 },
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    author = { Kalkov, Igor and Gurchian, Alexandru and Kowalewski,
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    title = { Priority Inheritance during Remote Procedure Calls in
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    booktitle = { Proceedings of the 13th International Workshop on
Java
Technologies for Real-time and Embedded Systems },
    publisher = { ACM },
    pages = { 5, 10 Seiten },
    series = { ACM Other conferences },
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    organization = { 13. International Workshop on Java Technologies
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  Th{"o"}nnessen, David },  
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  journal = { IEE - Elektrische Automatisierung + Antriebstechnik },  
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  title = { An Approach for Using Mobile Devices In Industrial  
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    doi = { 10.1007/978-3-319-05452-0_27 },
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  doi = { 10.1109/ETFA.2014.7005218 },  
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  booktitle = { 11th International Workshop on Java Technologies for
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        Real-time and Embedded Systems : JTRES 2013 ; 9-10 October
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    doi = { 10.1145/2512989.2512999 },
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<https://www.embedded.rwth-aachen.de/doku.php?id=en:forschung:projekte:rtandroid>

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