



An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid

Eric J. Bach, Mark G. Fickel

[Download now](#)

[Read Online](#) 

An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid

Eric J. Bach, Mark G. Fickel

This thesis analyzes the feasibility, functionality, efficacy and usability of IEEE 802.x wireless mesh networks in multiple DoD contexts. Through multiple field and lab experiments and hardware investigations, an assessment is performed on the realistic implementation issues of wireless mesh networks and their possible applications. A detailed examination is conducted of the variable elements, operational constraints, and possible decision points for developing a usable, robust, self-organizing, wireless mesh network that can be leveraged for maximum usability and shared situational awareness in network-centric operations. The research investigates the suitability of currently available COTS hardware and software wireless mesh networking components for geographically distributed networks. Additionally, a product-line software architecture and a common data interchange XML vocabulary are proposed as the enabling technology elements to carry application layer mesh forward for integration of collaborative sensor-decision maker adaptive networks within the Global Information Grid. The thesis includes the design and implementation of the first Naval Postgraduate School testbed for tactical level mesh networking with unmanned vehicles, unattended sensors, and warrior networking nodes. This thesis also lays the groundwork for further research into lower OSI-layer routing protocols for DoD mesh networks, development of mesh-aware applications, as well as a GIG-wide mesh network architecture.

 [Download An Analysis of the Feasibility and Applicability o ...pdf](#)

 [Read Online An Analysis of the Feasibility and Applicability ...pdf](#)

An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid

Eric J. Bach, Mark G. Fickel

An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel

This thesis analyzes the feasibility, functionality, efficacy and usability of IEEE 802.x wireless mesh networks in multiple DoD contexts. Through multiple field and lab experiments and hardware investigations, an assessment is performed on the realistic implementation issues of wireless mesh networks and their possible applications. A detailed examination is conducted of the variable elements, operational constraints, and possible decision points for developing a usable, robust, self-organizing, wireless mesh network that can be leveraged for maximum usability and shared situational awareness in network-centric operations. The research investigates the suitability of currently available COTS hardware and software wireless mesh networking components for geographically distributed networks. Additionally, a product-line software architecture and a common data interchange XML vocabulary are proposed as the enabling technology elements to carry application layer mesh forward for integration of collaborative sensor-decision maker adaptive networks within the Global Information Grid. The thesis includes the design and implementation of the first Naval Postgraduate School testbed for tactical level mesh networking with unmanned vehicles, unattended sensors, and warrior networking nodes. This thesis also lays the groundwork for further research into lower OSI-layer routing protocols for DoD mesh networks, development of mesh-aware applications, as well as a GIG-wide mesh network architecture.

An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel **Bibliography**

 [Download An Analysis of the Feasibility and Applicability o ...pdf](#)

 [Read Online An Analysis of the Feasibility and Applicability ...pdf](#)

Download and Read Free Online An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel

Editorial Review

Users Review

From reader reviews:

Lawrence Gregory:

This An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid book is absolutely not ordinary book, you have it then the world is in your hands. The benefit you will get by reading this book is definitely information inside this e-book incredible fresh, you will get information which is getting deeper a person read a lot of information you will get. This specific An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid without we know teach the one who studying it become critical in contemplating and analyzing. Don't end up being worry An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid can bring any time you are and not make your bag space or bookshelves' grow to be full because you can have it in your lovely laptop even cell phone. This An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid having very good arrangement in word along with layout, so you will not sense uninterested in reading.

Daniele Vaugh:

Now a day people that Living in the era wherever everything reachable by talk with the internet and the resources inside can be true or not need people to be aware of each information they get. How a lot more to be smart in getting any information nowadays? Of course the reply is reading a book. Studying a book can help people out of this uncertainty Information specially this An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid book because book offers you rich information and knowledge. Of course the knowledge in this book hundred per-cent guarantees there is no doubt in it you probably know this.

Anita Jones:

Typically the book An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid has a lot of knowledge on it. So when you make sure to read this book you can get a lot of gain. The book was published by the very famous author. This articles author makes some research before write this book. This book very easy to read you can obtain the point easily after looking over this book.

Harold Young:

What is your hobby? Have you heard that question when you got students? We believe that that question was given by teacher with their students. Many kinds of hobby, Every individual has different hobby. Therefore you know that little person including reading or as studying become their hobby. You need to understand that reading is very important along with book as to be the matter. Book is important thing to include you knowledge, except your own teacher or lecturer. You get good news or update regarding something by book. Many kinds of books that can you go onto be your object. One of them is niagra An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid.

**Download and Read Online An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel
#P2GB5I7TQ89**

Read An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel for online ebook

An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel books to read online.

Online An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel ebook PDF download

An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel Doc

An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel Mobipocket

An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel EPub

P2GB5I7TQ89: An Analysis of the Feasibility and Applicability of IEEE 802.x Wireless Mesh Networks within the Global Information Grid Eric J. Bach, Mark G. Fickel