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Introduction to z/OS Communications Server IP

z/OS Communications Server is the IBM implementation of the standard TCP/IP protocol suite on the z/OS platform. TCP/IP is a component product of the z/OS Communications Server, and it provides a multitude of technologies. Collectively, those technologies provide an Open Systems environment for the development, establishment, and maintenance of applications and systems.

The z/OS Communications Server product includes ACF/VTAM, in addition to TCP/IP.

This chapter presents a basic overview of z/OS Communications Server IP as it is implemented in the z/OS environment. You can find a more complete and comprehensive explanation of z/OS Communications Server IP from the publications that are listed in 1.4, "Additional information" on page 18.

This chapter discusses the following topics.

Section	Topic
1.1, "Overview" on page 2	Basic concepts of z/OS Communications Server IP
1.2, "Featured functions" on page 3	Key characteristics of z ⁱ OS Communications Server IP and why they might be important in your environment
1.3, "z/OS Communications Server IP implementation" on page 4	Functional overview of how z/OS Communications Server IP is implemented

Zos Communications Server Ip Configuration Guide

Mike Ebbers,Rama Ayyar,Octavio L. Ferreira,Gazi Karakus,Yukihiko Miyamoto,Joel Porterie,Andi Wijaya,IBM Redbooks

Zos Communications Server Ip Configuration Guide:

IBM z/OS V1R13 Communications Server TCP/IP Implementation: Volume 2 Standard Applications Mike Ebbers, Rama Ayyar, Octavio L. Ferreira, Yohko Ojima, Gilson Cesar de Oliveira, Mike Riches, Maulide Xavier, IBM Redbooks, 2011-12-27 For more than 40 years IBM mainframes have supported an extraordinary portion of the world's computing work providing centralized corporate databases and mission critical enterprise wide applications. The IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors providing among many other capabilities world class state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for ever more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance about how to enable the most commonly used and important functions of z OS Communications Server TCP IP This IBM Redbooks publication provides useful implementation scenarios and configuration recommendations for many of the TCP IP standard applications that z OS Communications Server supports For more specific information about z OS Communications Server standard applications high availability and security see the other volumes in the series IBM z OS V1R13 Communications Server TCP IP Implementation Volume 1 Base Functions Connectivity and Routing SG24 7996 IBM z OS V1R13 Communications Server TCP IP Implementation Volume 3 High Availability Scalability and Performance SG24 7998 IBM z OS V1R13 Communications Server TCP IP Implementation Volume 4 Security and Policy Based Networking SG24 7999 For comprehensive descriptions of the individual parameters for setting up and using the functions that we describe in this book along with step by step checklists and supporting examples see the following publications z OS Communications Server IP Configuration Guide SC31 8775 z OS Communications Server IP Configuration Reference SC31 8776 z OS Communications Server IP User's Guide and Commands SC31 8780 This book does not duplicate the information in those publications Instead it complements them with practical implementation scenarios that can be useful in your environment To determine at what level a specific function was introduced see z OS Communications Server New Function Summary GC31 8771 For complete details we encourage you to review the documents that are listed in the additional resources section at the end of each chapter IBM z/OS V2R2 Communications Server TCP/IP Implementation: Volume 3 High Availability, Scalability, and Performance Bill White, Octavio Ferreira, Teresa Missawa, Teddy Sudewo, IBM Redbooks, 2017-04-07 For more than 50 years IBM mainframes have supported an extraordinary portion of the world s

computing work providing centralized corporate databases and mission critical enterprise wide applications IBM z SystemsTM platform the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors in providing among many other capabilities world class and state of the art support for the TCP IP protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for even more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance for enabling the most commonly used and important functions of z OS Communications Server TCP IP This IBM Redbooks publication is for people who install and support z OS Communications Server It starts with a discussion of virtual IP addressing VIPA for high availability with and without a dynamic routing protocol It describes several workload balancing approaches with the z OS Communications Server It also explains optimized sysplex distributor intra sysplex load balancing This function represents improved application support using optimized local connections together with weight values from extended Workload Manager WLM interfaces Finally this book highlights important tuning parameters and suggests parameter values to maximize performance in many client installations **IBM** z/OS V2R2 Communications Server TCP/IP Implementation: Volume 2 Standard Applications Bill White, Octavio Ferreira, Teresa Missawa, Teddy Sudewo, IBM Redbooks, 2016-09-21 For more than 50 years IBM mainframes have supported an extraordinary portion of the world's computing work providing centralized corporate databases and mission critical enterprise wide applications IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors in providing among many other capabilities world class and state of the art support for the TCP IP Internet Protocol suite TCP IP is a large and evolving collection of communication protocols that are managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for even more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance for enabling the most commonly used and important functions of z OS Communications Server TCP IP This IBM Redbooks publication provides useful implementation scenarios and configuration recommendations for many of the TCP IP standard applications that z OS

Communications Server supports IBM z/OS V2R2 Communications Server TCP/IP Implementation Volume 1:

Base Functions, Connectivity, and Routing Bill White, Octavio Ferreira, Teresa Missawa, Teddy Sudewo, IBM Redbooks, 2016-11-30 For more than 50 years IBM mainframes have supported an extraordinary portion of the world s computing work providing centralized corporate databases and mission critical enterprise wide applications IBM zTM Systems the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors in providing among many other capabilities world class and state of the art support for the TCP IP internet protocol suite TCP IP is a large and evolving collection of communication protocols that is managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the internet The convergence of IBM mainframe capabilities with internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for even more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance for enabling the most commonly used and important functions of z OS Communications Server TCP IP This IBM Redbooks publication is for people who install and support z OS Communications Server It introduces z OS Communications Server TCP IP describes the system resolver and shows the implementation of global and local settings for single and multi stack environments It presents implementation scenarios for IBM z/OS V2R1 Communications Server TCP/IP TCP IP base functions connectivity routing and subplexing

Implementation Volume 4: Security and Policy-Based Networking Rufus P. Credle Jr., Uma Maheswari Kumaraguru, Gilson Cesar de Oliveira, Micky Reichenberg, Georg Senfleben, Rutsakon Techo, Maulide Xavier, IBM

Redbooks,2016-02-10 For more than 40 years IBM mainframes have supported an extraordinary portion of the world s computing work providing centralized corporate databases and mission critical enterprise wide applications IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors in providing among many other capabilities world class and state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for ever more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance about how to enable the most commonly used and important functions of z OS

Communications Server TCP IP This IBM Redbooks publication is for people who install and support z OS Communications Server It explains how to set up security for your z OS networking environment Network security requirements have become more stringent and complex Because many transactions are from unknown users and untrusted networks careful attention must be given to host and user authentication data privacy data origin authentication and data integrity Also because security technologies are complex and can be confusing we include helpful tutorial information in the appendixes of this book

IBM z/OS V1R12 Communications Server TCP/IP Implementation: Volume 4 Security and Policy-Based Networking Mike Ebbers, Rama Ayyar, Octavio L. Ferreira, Gazi Karakus, Yukihiko Miyamoto, Joel Porterie, Andi Wijaya, IBM Redbooks, 2011-07-27 For more than 40 years IBM mainframes have supported an extraordinary portion of the world s computing work providing centralized corporate databases and mission critical enterprise wide applications The IBM System z provides world class and state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for ever more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance about how to enable the most commonly used and important functions of z OS Communications Server TCP IP This IBM Redbooks publication explains how to set up security for the z OS networking environment Network security requirements have become more stringent and complex Because many transactions come from unknown users and untrusted networks careful attention must be given to host and user authentication data privacy data origin authentication and data integrity We also include helpful tutorial information in the appendixes of this book because security technologies can be quite complex For more specific information about z OS Communications Server base functions standard applications and high availability refer to the other volumes in the series IBM z/OS V2R1 Communications Server TCP/IP Implementation Volume 2: Standard Applications Rufus P. Credle Jr., Uma Maheswari Kumaraguru, Gilson Cesar de Oliveira, Micky Reichenberg, Georg Senfleben, Rutsakon Techo, Maulide Xavier, IBM Redbooks, 2013-12-17 For more than 40 years IBM mainframes have supported an extraordinary portion of the worlds computing work providing centralized corporate databases and mission critical enterprise wide applications IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors in providing among many other capabilities world class state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because

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Implementation Volume 4: Security and Policy-Based Networking Bill White, Mike Ebbers, Demerson Cilloti, Gwen Dente, Sandra Elisa Freitag, Hajime Nagao, Carlos Bento Nonato, Matt Nuttall, Frederick James Rathweg, Micky Reichenberg, Andi Wijaya, Maulide Xavier, IBM Redbooks, 2010-04-26 Note This PDF is over 900 pages so when you open it with Adobe Reader and then do a Save As the save process could time out Instead right click on the PDF and select Save Target As For more than 40 years IBM mainframes have supported an extraordinary portion of the world's computing work providing centralized corporate databases and mission critical enterprise wide applications The IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors providing among many other capabilities world class state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for ever more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance about how to enable the most commonly used and important functions of z OS Communications Server TCP IP This IBM Redbooks publication explains how to set up security for your z OS networking environment With the advent of TCP IP and the Internet network security requirements have become more stringent and complex Because many transactions come from unknown users and from untrusted networks such as the Internet careful attention must be given to host and user authentication data privacy data origin authentication and data integrity Also because security technologies are complex and can be confusing we include helpful tutorial information in the appendixes of this book For more specific information about z OS Communications Server base functions standard applications and high availability refer to the other volumes in the series IBM z OS V1R11 Communications Server TCP IP Implementation Volume 1 Base Functions Connectivity and Routing SG24 7798 IBM z OS V1R11 Communications Server TCP IP Implementation

Volume 2 Standard Applications SG24 7799 IBM z OS V1R11 Communications Server TCP IP Implementation Volume 3 High Availability Scalability and Performance SG24 7800 In addition z OS Communications Server IP Configuration Guide SC31 8775 z OS Communications Server IP Configuration Reference SC31 8776 and z OS Communications Server IP User's Guide and Commands SC31 8780 contain comprehensive descriptions of the individual parameters for setting up and using the functions that we describe in this book They also include step by step checklists and supporting examples It is not the intent of this book to duplicate the information in those publications but to complement them with practical implementation scenarios that might be useful in your environment To determine at what level a specific function was introduced refer to z OS Communications Server New Function Summary GC31 8771 IBM z/OS V1R13 Communications Server TCP/IP Implementation: Volume 1 Base Functions, Connectivity, and Routing Mike Ebbers, Rama Ayyar, Octavio L. Ferreira, Yohko Ojima, Gilson Cesar de Oliveira, Mike Riches, Maulide Xavier, IBM Redbooks, 2012-02-03 For more than 40 years IBM mainframes have supported an extraordinary portion of the world's computing work providing centralized corporate databases and mission critical enterprise wide applications The IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors in providing among many other capabilities world class and state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for even more secure scalable and highly available mainframe TCP IP implementations The z OS Communications Server TCP IP Implementation series provides understandable step by step guidance about how to enable the most commonly used and important functions of z OS Communications Server TCP IP This IBM Redbooks publication is for people who install and support z OS Communications Server It introduces z OS Communications Server TCP IP discusses the system resolver showing implementation of global and local settings for single and multi stack environments It presents implementation scenarios for TCP IP base functions connectivity routing virtual MAC support and IBM z/OS V1R12 Communications Server TCP/IP Implementation: Volume 1 Base Functions, sysplex subplexing Connectivity, and Routing Mike Ebbers, Rama Ayyar, Octavio L. Ferreira, Gazi Karakus, Yukihiko Miyamoto, Joel Porterie, Andi Wijaya, IBM Redbooks, 2012-11-06 For more than 40 years IBM mainframes have supported an extraordinary portion of the world's computing work providing centralized corporate databases and mission critical enterprise wide applications The IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors in providing among many other capabilities world class and state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for even more secure scalable and highly available mainframe TCP IP implementations The z OS Communications Server TCP IP Implementation series provides understandable step by step guidance about how to enable the most commonly used and important functions of z OS Communications Server TCP IP In this IBM Redbooks publication we provide an introduction to z OS Communications Server TCP IP We then discuss the system resolver showing the implementation of global and local settings for single and multi stack environments We present implementation scenarios for TCP IP Base functions Connectivity Routing Virtual MAC support and sysplex subplexing IBM z/OS V2R1 Communications Server TCP/IP Implementation Volume 3: High Availability, Scalability, and Performance Rufus P. Credle Jr., Uma Maheswari Kumaraguru, Gilson Cesar de Oliveira, Micky Reichenberg, Georg Senfleben, Rutsakon Techo, Maulide Xavier, IBM Redbooks, 2017-04-07 For more than 40 years IBM mainframes have supported an extraordinary portion of the world s computing work providing centralized corporate databases and mission critical enterprise wide applications IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors in providing among many other capabilities world class and state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing information technology and driving requirements for even more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance for enabling the most commonly used and important functions of z OS Communications Server TCP IP This IBM Redbooks publication is for people who install and support z OS Communications Server It starts by describing virtual IP addressing VIPA for high availability with and without a dynamic routing protocol It describes several workload balancing approaches with the z OS Communications Server It also explains optimized sysplex distributor intra sysplex load balancing This function represents improved application support using optimized local connections together with weight values from extended Workload Manager WLM interfaces Finally this book highlights important tuning parameters and suggests parameter values to maximize performance in many client installations **IBM z/OS V1R12**

Communications Server TCP/IP Implementation: Volume 3 High Availability, Scalability, and Performance Mike Ebbers, Rama Ayyar, Octavio L. Ferreira, Gazi Karakus, Yukihiko Miyamoto, Joel Porterie, Andi Wijaya, IBM Redbooks, 2011-05-04 For more than 40 years IBM mainframes have supported an extraordinary portion of the world's computing work providing centralized corporate databases and mission critical enterprise wide applications. The IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors providing among many other capabilities world class state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for ever more secure scalable and highly available mainframe TCP IP implementations In this IBM Redbooks publication we begin with a discussion of Virtual IP Addressing VIPA a TCP IP high availability approach that was introduced by the z OS Communications Server We then show how to use VIPA for high availability both with and without a dynamic routing protocol We also discuss a number of different workload balancing approaches that you can use with the z OS Communications Server We also explain the optimized Sysplex Distributor intra sysplex load balancing This function represents improved multitier application support using optimized local connections together with weight values from extended Workload Manager WLM interfaces Finally we highlight the most important tuning parameters and suggest parameter values that we observed to maximize performance in many client installations

Introduction to the New Mainframe: z/OS Basics Mike Ebbers, John Kettner, Wayne O'Brien, Bill Ogden, IBM Redbooks, 2012-01-04 This IBM Redbooks publication provides students of information systems technology with the background knowledge and skills necessary to begin using the basic facilities of a mainframe computer It is the first in a planned series of book designed to introduce students to mainframe concepts and help prepare them for a career in large systems computing For optimal learning students are assumed to have successfully completed an introductory course in computer system concepts such as computer organization and architecture operating systems data management or data communications They should also have successfully completed courses in one or more programming languages and be PC literate This book can also be used as a prerequisite for courses in advanced topics or for internships and special studies It is not intended to be a complete text covering all aspects of mainframe operation or a reference book that discusses every feature and option of the mainframe facilities Others who will benefit from this book include experienced data processing professionals who have worked with non mainframe platforms or who are familiar with some aspects of the mainframe but want to become knowledgeable with other facilities and benefits of the mainframe environment

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Communications Server TCP/IP Implementation: Volume 3 High Availability, Scalability, and Performance Mike Ebbers, Rama Ayyar, Octavio L. Ferreira, Yohko Ojima, Gilson Cesar de Oliveira, Mike Riches, Maulide Xavier, IBM Redbooks, 2014-01-27 For more than 40 years IBM mainframes have supported an extraordinary portion of the world s computing work providing centralized corporate databases and mission critical enterprise wide applications The IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors in providing among many other capabilities world class and state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly TCP IP is dramatically changing the face of information technology and driving requirements for even more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance about how to enable the most commonly used and important functions of z OS Communications Server TCP IP This IBM Redbooks publication is for people who install and support z OS Communications Server It starts with a discussion of virtual IP addressing VIPA for high availability with and without a dynamic routing protocol It describes several workload balancing approaches with the z OS Communications Server It also explains optimized Sysplex Distributor intra sysplex load balancing This function represents improved application support using optimized local connections together with weight values from extended Workload Manager WLM interfaces Finally this book highlights important tuning parameters and suggests parameter values to maximize performance in many client installations **IBM** z/OS V1R11 Communications Server TCP/IP Implementation Volume 3: High Availability, Scalability, and Performance Bill White, Mike Ebbers, Demerson Cilloti, Gwen Dente, Sandra Elisa Freitag, Hajime Nagao, Carlos Bento Nonato, Frederick James Rathweg, Micky Reichenberg, Maulide Xavier, Thanks to the following people, IBM Redbooks, 2010-02-22 For more than 40 years IBM mainframes have supported an extraordinary portion of the world s computing work providing centralized corporate databases and mission critical enterprise wide applications The IBM System z the latest generation of the IBM distinguished family of mainframe systems has come a long way from its IBM System 360 heritage Likewise its IBM z OS operating system is far superior to its predecessors providing among many other capabilities world class state of the art support for the TCP IP Internet protocol suite TCP IP is a large and evolving collection of communication protocols managed by the Internet Engineering Task Force IETF an open volunteer organization Because of its openness the TCP IP protocol suite has become the foundation for the set of technologies that form the basis of the Internet The convergence of IBM mainframe capabilities with Internet technology connectivity and standards particularly

TCP IP is dramatically changing the face of information technology and driving requirements for ever more secure scalable and highly available mainframe TCP IP implementations The IBM z OS Communications Server TCP IP Implementation series provides understandable step by step guidance about how to enable the most commonly used and important functions of z OS Communications Server TCP IP In this IBM Redbooks publication we begin with a discussion of Virtual IP Addressing VIPA a TCP IP high availability approach that was introduced by the z OS Communications Server We then show how to use VIPA for high availability both with and without a dynamic routing protocol We also discuss a number of different workload balancing approaches that you can use with the z OS Communications Server We also explain the optimized Sysplex Distributor intra sysplex load balancing This function represents improved multitier application support using optimized local connections together with weight values from extended Workload Manager WLM interfaces Finally we highlight the most important tuning parameters and suggest parameter values that we observed to maximize performance in many client installations For more specific information about z OS Communications Server base functions standard applications and security refer to the other volumes in the series IBM z OS V1R11 Communications Server TCP IP Implementation Volume 1 Base Functions Connectivity and Routing SG24 7798 IBM z OS V1R11 Communications Server TCP IP Implementation Volume 2 Standard Applications SG24 7799 IBM z OS V1R11 Communications Server TCP IP Implementation Volume 4 Security and Policy Based Networking SG24 7801 For comprehensive descriptions of the individual parameters for setting up and using the functions described in this book along with step by step checklists and supporting examples refer to the following publications z OS Communications Server IP Configuration Guide SC31 8775 z OS Communications Server IP Configuration Reference SC31 8776 z OS Communications Server IP User's Guide and Commands SC31 8780 This book does not duplicate the information in those publications Instead it complements them with practical implementation scenarios that can be useful in your environment To determine at what level a specific function was introduced refer to z OS Communications Server New Function Summary GC31 8771 For complete details we encourage you to review the documents referred to in Related publications on page 303 Extending z/OS System Management Functions with IBM zAware Frank Kyne, Karan Singh, Karla Arndt, Stephen Barton, Mark Noonan, Ryotaroh Sawada, IBM Redbooks, 2013-08-01 This IBM Redbooks publication explains the capabilities of the IBM System z Advanced Workload Analysis Reporter IBM zAware and shows how you can use it as an integral part of your existing System z management tools IBM zAware is an integrated self learning analytics solution for IBM z OS that helps identify unusual system behavior in near real time It is designed to help IT personnel improve problem determination so they can restore service quickly and improve overall availability The book gives you a conceptual description of the IBM zAware appliance It will help you to understand how it fits into the family of IBM mainframe system management tools that include Runtime Diagnostics Predictive Failure Analysis PFA IBM Health Checker for z OS and z OS Management Facility z OSMF You are provided with the information you need to get IBM zAware up and running so you can

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