## Extracted from:

## Pragmatic Project Automation

## How to Build, Deploy, and Monitor Java Applications

This PDF file contains pages extracted from Pragmatic Project Automation, one of the Pragmatic Starter Kit series of books for project teams. For more information, visit http://www.pragmaticprogrammer.com/starter\_kit.

**Note:** This extract contains some colored text (particularly in code listing). This is available only in online versions of the books. The printed versions are black and white. Pagination might vary between the online and printer versions; the content is otherwise identical.

Copyright © 2004 The Pragmatic Programmers, LLC

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior consent of the publisher.

## Contents

Ab	out t	he Starter Kit	хi		
Pr	Preface				
1	Intr	roduction	1		
	1.1	Look Ma, No Hands!	1		
	1.2	Types of Automation	4		
	1.3	Questions About Automation	6		
	1.4	Road Map	9		
2	One	-Step Builds	10		
	2.1	Building Software Is Like Making Sausage	10		
	2.2	Choosing a Project Directory Structure	15		
	2.3	Making Your First Build	16		
	2.4	Building with Ant	19		
	2.5	Taste-Testing the Build	29		
	2.6	Cleaning Up	34		
	2.7	Scripting a Build	35		
	2.8	Getting an Early Start	39		
3	Sch	eduled Builds	42		
	3.1	Scheduling Your First Build	43		
	3.2	Putting a Build on CruiseControl	46		
	3.3	Running CruiseControl	58		
	3.4	Publishing the Build Status	63		
	3.5	Scaling Up	68		
4	Pus	h-Button Releases	71		
	4.1	Releasing Early and Often	71		
	4.2	Preparing for Your First Release	72		
	4.3	Packaging the Release	78		
	4.4	Generating the Release	85		
	4.5	Tagging the Release	90		

	4.6	Handing Off the Release 9	2
	4.7	Automating the Release Procedure 9	2
	4.8	Generating Daily Distributions 9	4
5	Insta	allation and Deployment 9	7
	5.1	Delivering the Goods	7
	5.2	Installing the Standard Distribution File 9	8
	5.3	Troubleshooting by Phone 9	9
	5.4	Troubleshooting with Diagnostic Tests 10	1
	5.5	Enhancing Your Installed Image 10	7
	5.6	Deploying Hosted Applications 11	5
	5.7	Auto-Updating Installed Applications 12	0
6	Mon	itoring 12	5
	6.1	Monitoring Scheduled Builds	5
	6.2	Getting Feedback from Visual Devices 12	8
	6.3	Monitoring Your Java Process	3
	6.4	Checking Up on Your Web Application 13	4
	6.5	Watching Log Files	6
	6.6	Monitoring with log4j $\dots \dots 13$	8
	6.7	Building Trip Wires with RSS	1
	6.8	Monitoring Health with a Debug Command 14	3
	6.9	Creating a Crash Report	4
	6.10	3-2-1	5
	6.11	Automate!	7
A	Reso	ources 14	8
	A.1	On the Web	8
	A.2	Bibliography	9
В	Prag	matic Project Automation: Summary 15	0