

PERFECTION IN AUTOMATION A MEMBER OF THE ABB GROUP

B&R Hypervisor - 配置和初始操作 | 中文版

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1 概述

在本教程中, 你将了解到。

- 在AS中配置B&R Hypervisor并创建安装驱动器
- 为安装准备工业PC
- 安装B&R管理程序
- 大约20分钟

2 自动化工作室中的配置

2.1 开放式CPU配置

B&R Hypervisor可以在工业PC的CPU配置中被激活。

关于B&R Hypervisor的信息,请参见自动化帮助。

"实时操作系统/目标系统/目标系统-SG4/B&R Hypervisor"

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2.2 启用B&R管理程序

配置在 "B&R Hypervisor配置 "部分完成。



1 点击(^{≟---} 督 B&R Hypervisor configuration)。

2_{点击(} off)。

当B&R Hypervisor被启用时,一些特定的设置变得可用。例如,出现一个名为 "ETHinternal "的新网络接口。

该接口作为GPOS和Automation Runtime(AR)之间的虚拟网络连接。

详情请见自动化帮助中的 "Real-time operating system (实时操作系统) - SG4 (B&R

Hypervisor) 特点 (Intersystem communication) "

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1点击保存(📙 의)。

B&R Hypervisor提供了为Automation Runtime指定随机存取内存(DRAM)的可能性。 其余安装的RAM可用于GPOS。

B&R Hypervisor提供更多设置。这些设置只有在 "扩展参数可见性 "下才可用。

有关这些设置的信息,请参见自动化帮助。

"Real-time operating system (目标系统 - SG4) B&R Hypervisor (安装和配置) Automation Studio中的配置" 。

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2.3 配置ETHinternal MAC地址

启用B&R Hypervisor后,有一个额外的以太网接口可用。 该接口代表GPOS和自动化运行系统之间的虚拟接口。其配置基本上相当于一个普通的以太 网接口。



┛) 树项。



1 点击**配置(Configuration)**菜单项。

默认情况下,为该接口配置了一个DHCP服务器。安装B&R Hypervisor后,GPOS会自动连接。

由于这是一个虚拟接口,因此可以配置一个MAC地址,该接口用来登录网络。这里设置的MAC地址 是由GPOS使用的。AR的虚拟接口用一个高1的地址登录。 通常情况下,默认设置就足够了。

2.4 分配USB接口

在一个管理程序系统中,可以将接口单独分配给操作系统。例如,将一些USB接口分配给GPOS是

有意义的。

也可以选择多个接口,同时进行分配。





"通用属性 "窗口显示所有被标记的条目的通用设置。你可以为标记的USB接口选择相应的操作系统。





2.5 指派ETH接口

B&R Hypervisor使得为每个操作系统分配一个网络接口成为可能。没有必要通过GPOS进行网络通信隧道。





1 单击**操作系统**(按钮。



1 点击GPOS(通用操作系统)(

GPOS (general purpose OS)) 列表项。

) 下拉菜单



1点击保存(📙 의)。

2.6 创建一个安装驱动器

B&R Hypervisor的配置已经完成。现在可以创建一个 USB 安装驱动器。然后用它在工业PC 上调试B&R Hypervisor。



可以选择安装介质。 它将被格式化,用于将B&R Hypervisor投入运行的数据(安装数据+项目)将被存储在其中。

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现在可以将安装好的驱动器插入工业PC,然后将B&R Hypervisor和项目投入运行。

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3 选择GPOS

3.1 Windows

3.1.1 设置

3.1.1.1 改变设备驱动程序(SATA)

要安装B&R Hypervisor,必须对已经安装的Windows系统进行相应的准备。首先,必须改变系统 大容量存储(CFast、SSD)的驱动程序。



1 右键点击开始按钮。





制造商的驱动程序必须被标准的Windows驱动程序所取代。这是必要的,因为大容量 存储器是由B&R Hypervisor虚拟的。

📹 Intel(R) 100 Series/C230 Chipset Family SATA AHCI Controller 🕥 。 2 右键单击。Intel(r) 100系列...(



1 点击 更新驱动程序(Update driver)。	
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The ligt will show a sature others compatible with the device, and an same category as the device.	Next Cancel		
3			~ 도쿄 40) ENG

点击浏览我的电脑... (
 2 点击让我从列表中挑选....

→ Browse my computer for driver software Locate and install driver software manually.

)。





1 点击关闭(Close)。

更换驱动程序是通过执行系统重启来完成的。

so ropota ad adjudis troites inguter Roberts play staptors and interface Davies ATA/ATAC controllers ATA/ATAC controllers ATA/ATAC controllers ATA/ATAC controllers at and ether spointing devices enfort work adjutes is controllers to (COM & UP) it quotes to (COM & UP) it quotes esson to are devices to and evices to and evices to and evices	System Satting: Change To the indicare satting: have changed. You must restar your compater for these changes to by you write to restart your computer nos? You have to restart your computer nos? You have to restart your computer nos?	
		7 d0) ENG



3.1.1.2 将时间同步改为UTC

接下来,Windows中的时间存储处理必须改变为UTC时间。

这是必要的,以便Windows和Automation Runtime使用相同的RTC(实时时钟)的时间基础。



1 点击**开始(**



必须为此目的创建一个特殊的注册表项。这可以通过系统工具 "注册表编辑器 "来完成。

替代方案。

创建/更改密钥也可以使用管理员PowerShell和以下命令完成。

> Set-ItemProperty -路径

Registry::HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSetControl\TimeZoneInformation -名称RealTimeIsUniversal -值1



User Account Centrol × Do you want to allow this app to make changes to your device? •	

1 点击 是(

相应的注册表键有以下路径。

"HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\TimeZoneInformation\RealTimeIs Universal"

Recycle Bin				
x4				
Registry Editor File Edit View Favorites Help Computer/JHKEY_LOCAL_MACHINE	7		×	
Computer Computer	Name È(Default)	Type Data REG_SZ (value not set)		
・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・				へ 覧 d») DEU
1 点击HKEY_LOCAL_MACH		HKEY_LOCAL_MACHIN	E) 树项。	
2 点击SYSTEM (>	树形项目。			
_3 点击CurrentControlSet (ጶ [CurrentControlSe	t) 树项。		





必须在这里创建一个类型为 "DWORD "的新键。

³ 点击 新建 (New	〉)菜单项。
▲ 点击DWORD(DWORD (32-bit) Value)菜单项。新键收
到的值为 "1 "。		
⁵ 右键单击 Real	rimelsUniversal (^{اللو} Re	alTimelsUniversal)列表项。 6
点击修改(Mo	dify)菜单巧	页。

Devel Die						
Recycle Bin						
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	Carinter Editor					
	Edu Edu Verr Errenter Mele					
195	Computer\HKEY LOCAL MACHINE\SYSTEM\CurrentControlS	et\Control\TimeZoneInformation				
	> SecurePipeServers	Name .	Туре	Data	-	
	Edit DWORD (32-bit) Value	× sult)	REG_SZ	(value not set)		
	Value name:	veTimeBias	REG_DWORD	0x000001e0 (480)		
msysmon -	RealTimeIsUniversal	IghtBias	REG_DWORD	0xffffffc4 (4294967236)		
Shortcut	Value data: Base	ightName	REG_SZ	@tzres.dll,-211		
	1 Hexadecimal	ightStart	REG_BINARY REG_DWORD	00 00 03 00 02 00 02 00 00 00 00 00 00 00 00 00		
	Ubecma	dardBias	REG_DWORD	0x00000000 (0)		
	ОК С	ancel dardName	REG_SZ	@tzres.dll,-212		
	Storag	dardStart	REG_BINARY REG_SZ	00 00 06 00 01 00 02 00 00 00 00 00 00 00 00 00 00 Pacific Standard Time		
	StorPort	RealTimelsUniversal	REG_DWORD	0x00000000 (0)		
	> StSec					
	SystemResources					
	> TabletPC					
	> Terminal Server					
	- Ubpm					
	> UnitedVideo					
	> usbflags					
	> usbstor					
	> VAN					
	WalletService					
	> wenesve v					
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二日明化		又111。				
Recycle Bin						
x64						
	Registry Editor				- ×	
	File Edit View Favorites Help					
x86	Computer\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlS	et\Control\TimeZoneInformation				
	> SecurePipeServers ^	Name	Туре	Data	-	
	> SecurityProviders > ServiceAppreciatedEvents	(Default)	REG_SZ	(value not set)		
	ServiceGroupOrder	200 Rias	REG_DWORD	0x000001e0 (480) 0x000001e0 (480)		
msysmon -	> ServiceProvider	11 DaylightBias	REG_DWORD	0xffffffc4 (4294967236)		
Shortcut	> SNMP	and DaylightName	REG_SZ	@tzres.dll,-211		
	SQMServiceList	10 DaylightStart	REG_BINARY	00 00 03 00 02 00 02 00 00 00 00 00 00 00 00 00		
	> Srp	StandardBias	REG DWORD	0x00000000 (0)		
	apexensioncomig		and the second se			



1 点击关闭注册表编辑器(×) 按钮。

3.1.1.3 创建并释放一个大容量存储区域

Automation Runtime也需要与B&R Hypervisor相结合的系统大容量存储。这可以是一个单独的设备,例如第二张CFast卡,或者也可以在Windows和Automation Runtime之间分割一个大容量存储器。 要做到这一点,要提供给自动化运行时的区域必须是未分区和/或未分配的。 通常情况下,在安装Windows时已经考虑到了这一点。 对于需要使用第二个大容量存储器来安装B&R Hypervisor的系统,其分区方式必须匹配。(GPT与 MBR)



1 右键单击 "**开始"(**)按钮。



Recycle Bin										
📅 Disk Mar File Action	lanagement on View Help				- 0	×				
4 + I II	e i 🛛 📼 i 🖛 🗟 🔒	<mark>, 1</mark>								
Volume == (Disk 0 pa == SYSTEM (== Windows	Layout Dartition 1) Simple (D;) Simple (C;) Simple	Type File System Basic FAT32 Basic NTFS	Status Capacity Healthy (E 260 MB Healthy (A 29.36 GB Healthy (B 29.11 GB	Free Spa 260 MB 29.28 GB 19.63 GB	% Free 100 % 100 % 67 %					
- Disk 0 Basic		2 1	ndows (C)							
29.36 GB Online	260 MB Healthy (EFI Syste	m Partition) 29.	11 GB NTFS althy (Boot, Crash Dump, Prin	nary Partition)	Onen					1000
— Disk 1 Removable 294.2 GB Online	e SYSTEM (D:) 29.42 GB FAT32 Healthy (Active, P	Primary Partition)			Den Explore Mark Partition Change Drive Format Extend Volume	as Active etter and Paths				
Unallocat	ated 📕 Primary partition			3	Shrink Volume		and the second se			
e				<u> </u>	Delete Volume					
					Properties					
					Help					
# 2 # 🕿										^ 🖬 (
1 点击 磁盘	ま管理(Dis <u>k</u> M	anagei	nent)	菜单项。	
2 右键单击	Window	vs分区按	钮。							
³ 点击 缩小	体积(Shrink Vo	lume)]	菜单项	页。				
<mark>4</mark> 点击 收缩	(SI	hrink) 按钮。							

如果启用了B&R Hypervisor,大容量存储设备上的这个区域由Automation Runtime使用和管理,因此在Windows中不可见。如果Windows被单独启动,Automation Runtime分区在Windows中是可见的。



3.1.2 安装B&R Hypervisor驱动程序

下一步是安装B&R Hypervisor驱动程序。 这可以在安装盘的 "BRHypervisor\GPOSDriver\"下找到。

它使Windows和Automation Runtime之间的通信成为可能。包括虚拟网络接口和BRISC API。









← → × ↑ → This PC >	SYSTEM (D:) >				~ O	Search SYSTEM (D:)	Q	
Nam	A	Date modified	Type	Size				
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- Download	EFI	02/12/2021 11:54	File folder					
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	grubwin	02/12/2021 11:54	File tolder					
Pictures at	PIP	02/12/2021 11:54	File folder					
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> SYSTEM (D)								
> 🥩 Network								
14 items								





该驱动程序可以通过EXE文件轻松安装。

File F		View						-	□ × √ (3		
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Cuick	access top Inlead arres # C C Vijects top uments mloads ic wres os dows (C;) (EN (D;) M (D;) ork	Name	^ y64_1621	Date modified 09/02/2021 11:35	Type Application	5ize 4.900 KB					
1 item											
										~ 5	(14) DEU



<mark>1</mark> 点击 是(Yes)按钮。
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3.1.3 安装B&R Hypervisor

$ \rightarrow - \uparrow \Rightarrow $ Quick access >			🗸 😋 Search Quick access	٩
 Frequent folders (4) 				
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Documents				
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E Pictures				
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SYSTEM (D:)				
🥩 Network				
4 items				() III 📾



B&R Hypervisor的安装可以通过EXE文件轻松完成。

Varre Name Name Sector Desktop Jownloads r powploads r powploads r	Date modified 02/12/2021 11:54	Туре	Size		
Desktop D	02/12/2021 11:54	E1 6 11			
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- Downloads # grub	02/12/2021 11:54	File folder			
	02/12/2021 11:54	File folder			
📔 Documents 💉 📃 grubwin	02/12/2021 11:54	File folder			
📰 Pictures 💉 🗾 PIP	02/12/2021 11:54	File folder			
This DC	02/12/2021 11:54	File folder			
usr	02/12/2021 11:54	File folder			
> JD Objects ambcfg	02/12/2021 11:54	XML Document	1 KB		
> Desktop br_hypervisor_install.cfg	18/10/2021 14:18	CFG File	1 KB		
> 🗄 Document 🗰 BRHypInstaller	18/10/2021 14:18	Application	69 KB		
> 🕹 Download:	18/10/2021 14:18	File	5.557 KB		
> Music installBRHypervisor.sh	18/10/2021 14:18	SH File	3 KB		
> Pictures in rootfs.cpio.gz	18/10/2021 14:18	GZ File	24,447 KB		
Startup.nsh	18/10/2021 14:18	NSH File	1 KB		the second se
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y windows (C)					
> 🔤 SYSTEM (D:)					
> SYSTEM (D:)					
> Pietwork					
					transfer in the second second
14 items					

1 双击。BRHypInstaller(

📑 BRHypInstaller

)。

	User Account Control X	
	Do you want to allow this app from an unknown publisher to make changes to your device?	
	BRHypInstaller.exe	
	Publisher: Unknown File origin: Removable media on this computer	
	Show more details	
1	Yes No	
		-0

1 点击是(Yes) 按钮。
		1)(()III -

开始时,显示所有可以安装B&R Hypervisor的大容量存储区域。必须选择其中一个才能继续。

BrHypInstaller		- 0 ×	Туре	Size			
Name	Diskindex Offset [Mi8]	Size [MiB]	File folder				
\\.\PHYSICALDRIVE0	0 25081	4993	File folder				
			File folder				
			File tolder				
			File folder				
Free areas listed		Next	File folder				
	🖆 ambcfg	2/12/2021 11:54	XML Document	1 KB			
Desktop	br_hypervisor_install.cfg	18/10/2021 14:18	CFG File	1 KB			
Documents	BRHypinstaller	18/10/2021 14:18	Application	69 KB			
Sownloads	🗋 bzimage	18/10/2021 14:18	File	5.557 KB			
Music	installBRHypervisor.sh	18/10/2021 14:18	SH File	3 KB			
Pictures	rootfs.cpio.gz	18/10/2021 14:18	GZ File	24,447 KB			
Videos	startup.nsh	18/10/2021 14:18	NSH File	1 KB			
Windows (C:)							
SYSTEM (D:)							
SYSTEM (E)							
SYSTEM (D:)							
Network							
14 items 1 item select	A ST S VD					(REE 100)	
in items i item seech	60 00,5 KD						

1 点击**PHYSICALDRIVE0**列表项。

2点击下一步 (<u>Next</u>) 按钮。

一旦自动化运行时的分区准备好了, "安装GRUB "按钮就会被激活。

按下该按钮,就可以用GRUB启动加载器取代Windows启动加载器。GRUB使得在打开工 业PC时,可以在 "Windows "或 "B&R Hypervisor (Windows + AR) "的启动选项中进行 选择。



1 点击**安装GRUB(^{Install} GRUB**)按钮。

点击 "重新启动 "按钮后,系统将重新启动,安装将完成。



1 点击重新启动(Reboot) 按钮。

之后, B&R Hypervisor直接启动。

系统可能会自动执行额外的重启。当成功完成安装后,将显示熟悉的Windows视图。



成功安装B&R Hypervisor后,可以通过SDM在浏览器中轻松查询自动化运行时间和项目的状态。 为此,使用了虚拟网络接口的IP地址。

当然,自动化运行时间的状态也可以像往常一样在工业PC的LED上读取。

也可以在没有用户互动的情况下进行安装。有关其他信息,请参见自动化帮助下的。

"Real-time operating system (目标系统 - SG4)。

B&R Hypervisor (安装和配置) 在目标系统上安装B&R Hypervisor (通过GPOS的安装过程)

3.2 Linux

3.2.1 安装B&R Hypervisor驱动程序

要安装B&R Hypervisor,必须对已经安装的Linux系统进行相应的准备。

第一步是安装B&R Hypervisor驱动程序。 这可以在安装盘的 "BRHypervisor\GPOSDriver\"下找到。

它使Linux和Automation Runtime之间的通信成为可能。包括虚拟网络接口和BRISC API。



Trash				
		root		
	File Edit View Bookmarks 🗴	30 Tools Help		
	Places Home Folder Deskte Trash Can Applications SYSTEM Uniclient_d Wusic Pictures Videos Documents Videos Deskte Deskt	pp Documents Downloads Music Documents Downloads Music Templates thinclient_dri tmp	Pictures Videos	
	10 items (16 hidden)	Free space: 24.4 GiB (Tr	btal: 28.6 GiB)	
▲ ● ■ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	SYSTEM	🛆) 列表项		Ø 06:24 🚆 🦁



1 双击。BRHypervisor。

Trash	B Blungedar	
	File Edit View Bookmarks Go Tools Help	
	A C Y O O A /media/root/SYSTEM/BRHypervisor	
	Places Home Fold Desktop Trash Can Applications SYSTEM Documents Documents Videos Downloads	
	4 items Free space: 29.3 GiB (Total: 29.4 GiB)	







)。

使用 "软件包安装程序 "可以很容易地安装该驱动程序。

2 右键点击: brhypervisor.deb。

<mark>1</mark>双击。Linux(

Trash	
	Image: Second
🔨 🔹 💼 🚺 (j Linux	"brhypervisor_1.6.2.1_amd64.deb" (73.5 KiB) Debian p Free space: 29.3 GiB (Total: 29.4 GiB)

- 1 点击GDebi Package Installer(
- GDebi Package Installer) 菜单项。



- 1 点击**安装包(**
- Install Package) 按钮。

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	di Linux	
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	Places	
	Desktop britypervisor 1.6.2.1, amd	
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File Edit Help	ents	
Package: brhypervisor Status: Same	Reinstall Package s	
already Package Installer - brhypervis	Hemove Package bads	X
Installation finished		
Package 'brhypervisor_1.6.2.1_amd64.deb' was install Terminal	ed ior_1.6.2.1_amd64.deb" (73.5 KiB) Debian p Free space	: 29.3 GiB (Total: 29.4 GiB)
Automatically close after the changes have been s	uccessfully applied	
A . A . Itinux	ackage Installe	06-2
	dekage instancia	
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Accessories > ad Graphics > @ Internet \$ Ssund & Video Sund & Video Sund & Video Sund Runesal Access Preferences Run	Imedia/root/SYSTEM/BRHypervis Places Home Folder Desktop Trash Can Applications SYSTEM Documents Music Pictures Videos Downloads 1 item	nce: 1.8 GIB (Total: 1.9 GIB)
Accessories Graphics Graphics System Tools System Tools Universal Access Fun Counter	Imedia/root/SYSTEM/BRHypervis Places Home Folder Desktop Tash Can Applications SYSTEM Documents Music Pictures Videos Downloads 1 Item	xce: 18 GIB (Total: 1.9 GIB)
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▲ Accessories ▲ Graphics ● Internet ● Sound & Video ● System Tools ● Preferences ■ Preferences ■ Internat ■ Linux 1 点击开始按钮(安装完驱动程序后,在 能会出现启动问题。	Image: Contract of the second sec	kee:18 GIB (Tbtal: 19 GIB) 2 06:22 2 有序地重新启动系统。否则,可

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	Videos 🖾 Lock Screen	
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	Cancel	
<u>u</u>	tem	IB (Total; 1:9 GiB)
A - A 🖶 🗖 🚺 Linux		📕 06:28 🕎 🐻

1 点击重新启动 (🖸 Reboot

) 按钮。

驱动程序安装成功后,工业PC已准备好安装B&R Hypervisor。

3.2.2 安装B&R Hypervisor

通过U盘安装时,仍有必要对操作系统进行相应的准备。你可以通过选择其中一个操作系统 来获得这方面的信息。

然后,当工业PC被打开时,可以通过USB闪存驱动器进行安装。为此,必须在启动菜单中选择 安装驱动器。 安装过程中的用户指导与Linux中的指导是一致的。详情请见自动

化帮助。

"Real-time operating system (目标系统 - SG4)。

B&R Hypervisor (安装和配置) 在目标系统上安装B&R Hypervisor (通过USB安装驱动器安 装)。

在工业PC上的安装因支持的操作系统不同而略有不同。请选择你喜欢的安装方式。

Trash				
	1	root	*	
	Eile Edit View Bookmark	s <u>G</u> o Tools <u>H</u> elp		
		/root	\$° [
	Places Home Folder	esktop Documents Downloads	Music Pictures	
	Trash Can Applications	Ublic Templates thinclient_dri	tmp Videos	
	Left thinclient_d	ves		
	🕌 Music			
	📕 Videos 📕 Downloads			
	10 items (15 hidden)	Free space: 19	.9 GiB (Total: 23.7 GiB)	
🔨 = 🔍 🛄 🔲 🚺 root				P 04:17 📑 😺
1 右键单击系统(SYST	ГЕМ 🚔) 🦻	刘表项。	

B&R Hypervisor的安装可以在终端使用 "bash "命令和位于安装驱动器上的shell脚本开始。



1 点击在终端打开(

Open in Terminal) 菜单项。

Trash			!	/					
		File Edit View	Bookmarks Go Te	ools Help	9.		- 0 *		
		A - 0 -	0 0 ^ /m	edia/root/SYS	TEM		13		
File Edit Tabs Help rootgbrl-10:/media/root/5	root@bri-10:/media/ YSTEM# bash installt	Places Home Folder Desktop Tash Can Applications root/SYSTEM	BRHyperviso BRHyperviso SetupFiles RHypinstall er.exe tartup.nsh	EFI System Volume Information	grub usr installBRHyp ervisor.sh	grubwin ambcfg.xml	PIP PIP br_hyperviso r_install.cfg rootfs.cpio.gz		
					Free spac	e: 29.3 GiB (To	tal: 29.4 GiB)		
A - A -	SYSTEM	root@brl-10: /m		_		_		 	

安装脚本可以用 "bash "命令来启动。要做到这一点,只需将该脚本作为一个参数传递。

安装向导直接显示在终端窗口,可以用鼠标或键盘操作。

Trash		X		
		root	- 0 *	
	Eile Edit View Book	marks <u>G</u> o Tools <u>H</u> elp		
	▲ → O ~ O	O ☆ /root		
root@brl-10:/media/root/SYSTEM File Edit Tabs Help 86R Hypervisor Installation Please choose an option: Please choose an option:	Places Home Folder E Desktop Trash Can Applications	Desktop Documents Downloads Music	Videos	
		Free space: 19.9 GiB (Tota	otal: 23.7 GiB)	
- 2 - Exit >				
🔨 🐂 💭 📰 📰 🚺 root	: /m		2 04:1	18 🛒 😈
	_			

▲击 "安装" (Install) 列表项。
 2 点击确定 (< 0K >) 按钮。

在这里,必须选择大容量存储设备上的一个 "空闲 "区域。 可用的区域显示为黑色。不适合安装的区域显示为灰色。 在设置Linux时,必须已经考虑到B&R Hypervisor安装的自由区域(例如在B&R Linux安装程序中)。

对于需要使用第二个大容量存储器来安装B&R Hypervisor的系统,其分区方式必须匹配。(GPT与 MBR)



1 点击下一步(< Next >) 按钮。

这里再次显示了安装步骤的概述。这可以作为用户的信息。



点击 "重新启动 "按钮后,系统将重新启动,安装将完成。

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root@brl-10:/media/root/SYSTEM File Edit Tabs Help 868 Hypervisor Installation B68 Hypervisor Installation Installation successfully completed. System will be restarted.	Places	Esktop Documents Downloads	Music tmp Unders	
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之后, B&R Hypervisor直接启动。

系统可能会自动执行额外的重启。 当成功完成安装后,会显示熟悉的Linux视图。

成功安装B&R Hypervisor后,可以通过SDM在浏览器中轻松查询自动化运行时间和项目的状态。 为此,使用了虚拟网络接口的IP地址。

当然,自动化运行时间的状态也可以像往常一样在工业PC的LED上读取。

也可以在没有用户互动的情况下进行安装。有关其他信息,请参见自动化帮助下的。

"Real-time operating system (目标系统 - SG4)。

B&R Hypervisor (安装和配置) 在目标系统上安装B&R Hypervisor (通过GPOS的安装过程)

4 总结

配置是在Automation Studio中进行的

工业PC的B&R Hypervisor在CPU配置中被激活。接口可以单独分配给操作系统。

安装驱动器可以在Automation Studio中创建,包含在工业PC上启动B&R Hypervisor所需的一切。

工业PC的准备

要安装**B&R Hypervisor**,必须对操作系统进行适当配置(Linux或Windows)。 所有需要的驱动程序和软件包都在安装驱动器上。

在工业PC上的安装

B&R Hypervisor被直接安装在工业PC上。 安装可以通过从安装驱动器启动或直接使用安装文件从操作系统启动来进行。