
Subject: Re: Clocking issues - need some help
Posted by DJ on Sun, 03 Dec 2006 03:02:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

Neil,

First things first. Pick up your clock and move it close enough to your Multiface units to try the old cables. If you're good with them then there's your problem. I've lived in clocking hell long enough to know that one funky cable can drive you nuts..unless, of course, you want to be up all night and then try this as a last resort.

;o)

"Nil" <OIUOI@OIU.com> wrote in message news:45723a96\$1@linux...

>

> OK, so my system ***WAS*** rock-solid stable with the RME cards
> until either:

>

> a.) DeeJ jinxed it by talking about how unstable his system was
> with RME hardware vs' the Pulsar stuff, my system heard about
> it, got jealous for new hardware too, and started purposely
> fucking up so I'd buy it a new present too (LOL).

>

> b.) When I installed the Pulsar ASIO drivers, then de-installed
> them, something went wrong on the de-install & maybe that
> driver's still interfering with things somehow (but I can't
> find it, so I kinda doubt this is the case).

>

> c.) When I recently reconfigured my setup, I had to get some
> new BNC cables for my Word Clock since the other ones were too
> short. I have a feeling it has something to do with this, rather
> than the other two possibilities.

> 1.) The cables are all 12 feet long... not too long
> according to the Lucid website (I have a Genx6-96) where they
> recommend no longer than 15 feet.

> 2.) The cables are RG58A... I believe this is 50-Ohm... would
> that make a difference & cause jitter from hell?

> 3.) I never bothered terminating the Multifaces before, and
> never had a problem... should I be terminating the outputs?

> Could the longer cables be making a difference in whether I
> should be terminating the WC-outs on the RME's?

>

> 'preciate any help

>

> Neil

Subject: Clocking issues - need some help
Posted by [Neil](#) on Sun, 03 Dec 2006 03:46:46 GMT
[View Forum Message](#) <> [Reply to Message](#)

OK, so my system ***WAS*** rock-solid stable with the RME cards until either:

a.) Deej jinxed it by talking about how unstable his system was with RME hardware vs' the Pulsar stuff, my system heard about it, got jealous for new hardware too, and started purposely fucking up so I'd buy it a new present too (LOL).

b.) When I installed the Pulsar ASIO drivers, then de-installed them, something went wrong on the de-install & maybe that driver's still interfering with things somehow (but I can't find it, so I kinda doubt this is the case).

c.) When I recently reconfigured my setup, I had to get some new BNC cables for my Word Clock since the other ones were too short. I have a feeling it has something to with this, rather than the other two possibilities.

1.) The cables are all 12 feet long... not too long according to the Lucid website (I have a Genx6-96) where they recommend no longer than 15 feet.

2.) The cables are RG58A... I believe this is 50-Ohm... would that make a difference & cause jitter from hell?

3.) I never bothered terminating the Multifaces before, and never had a problem... should I be terminating the outputs? Could the longer cables be making a difference in whether I should be terminating the WC-outs on the RME's?

'preciate any help

Neil

Subject: Re: Clocking issues - need some help
Posted by [Neil](#) on Sun, 03 Dec 2006 05:39:56 GMT
[View Forum Message](#) <> [Reply to Message](#)

Well, I will try this, but ideally I need the 12-ft cables regardless, so I'm wondering if the 50-ohm ones (vs. the 75-ohms that I've seen most WC cables made up of) are what's causing the problem - or at least COULD be what's causing it.

Neil

"DJ" <nowayjose@dude.net> wrote:

>Neil,

>

>First things first. Pick up your clock and move it close enough to your

>Multiface units to try the old cables. If you're good with them then there's

>you problem. I've lived in clocking hell long enough to know that one funky

>cable can drive you nuts..unless,of course, you want to be up all night
>and

>then try this as a last resort.

>

>;o)

>

>"Nil" <OIUOI@OIU.com> wrote in message news:45723a96\$1@linux...

>>

>> OK, so my system ***WAS*** rock-solid stable with the RME cards

>> until either:

>>

>> a.) Deej jinxed it by talking about how unstable his system was

>> with RME hardware vs' the Pulsar stuff, my system heard about

>> it, got jealous for new hardware too, and started purposely

>> fucking up so I'd buy it a new present too (LOL).

>>

>> b.) When I installed the Pulsar ASIO drivers, then de-installed

>> them, something went wrong on the de-install & maybe that

>> driver's still interfering with things somehow (but I can't

>> find it, so I kinda doubt this is the case).

>>

>> c.) When I recently reconfigured my setup, I had to get some

>> new BNC cables for my Word Clock since the other ones were too

>> short. I have a feeling it has something to with this, rather

>> than the other two possibilities.

>> 1.) The cables are all 12 feet long... not too long

>> according to the Lucid wesbite (I have a Genx6-96) where they

>> recommend no longer than 15 feet.

>> 2.) The cables are RG58A... I believe this is 50-Ohm... would

>> that make a difference & cause jitter from hell?

>> 3.) I never bothered terminating the Multifaces before, and

>> never had a problem... should I be terminating the outputs?

>> Could the longer cables be making a difference in whether I

>> should be terminating the WC-outs on the RME's?

>>

>> 'preciate any help

>>

>> Neil

>
>

Subject: Re: Clocking issues - need some help
Posted by [Neil](#) on Sun, 03 Dec 2006 20:53:33 GMT
[View Forum Message](#) <> [Reply to Message](#)

OK, reconfigured things so that the Word Clock is closer to right in the middle between the devices that need to be clocked & went back to the 75-Ohm (and shorter) cables... it's working jitter-free now.

SO... if anyone didn't know this already: do NOT use 50-ohm RG58 BNC cables for Word Clocking!

Neil

"Neil" <OIUOIU@OI.com> wrote:

>

>Well, I will try this, but ideally I need the 12-ft cables >regardless, so I'm wondering if the 50-ohm ones (vs. the 75- >ohms that I've seen most WC cables made up of) are what's >causing the problem - or at least COULD be what's causing it.

>

>Neil

>

>

>

>"DJ" <nowayjose@dude.net> wrote:

>>Neil,

>>

>>First things first. Pick up your clock and move it close enough to your

>

>>Multiface units to try the old cables. If you're good with them then there's

>

>>you problem. I've lived in clocking hell long enough to know that one funky

>

>>cable can drive you nuts..unless,of course, you want to be up all night

>and

>>then try this as a last resort.

>>

>>;o)

>>

>>"Nil" <OIUOI@OIU.com> wrote in message news:45723a96\$1@linux...

>>>

>>> OK, so my system ***WAS*** rock-solid stable with the RME cards
>>> until either:
>>>
>>> a.) Dee jinxed it by talking about how unstable his system was
>>> with RME hardware vs' the Pulsar stuff, my system heard about
>>> it, got jealous for new hardware too, and started purposely
>>> fucking up so I'd buy it a new present too (LOL).
>>>
>>> b.) When I installed the Pulsar ASIO drivers, then de-installed
>>> them, something went wrong on the de-install & maybe that
>>> driver's still interfering with things somehow (but I can't
>>> find it, so I kinda doubt this is the case).
>>>
>>> c.) When I recently reconfigured my setup, I had to get some
>>> new BNC cables for my Word Clock since the other ones were too
>>> short. I have a feeling it has something to with this, rather
>>> than the other two possibilities.
>>> 1.) The cables are all 12 feet long... not too long
>>> according to the Lucid wesbite (I have a Genx6-96) where they
>>> recommend no longer than 15 feet.
>>> 2.) The cables are RG58A... I believe this is 50-Ohm... would
>>> that make a difference & cause jitter from hell?
>>> 3.) I never bothered terminating the Multifaces before, and
>>> never had a problem... should I be terminating the outputs?
>>> Could the longer cables be making a difference in whether I
>>> should be terminating the WC-outs on the RME's?
>>>
>>> 'preciate any help
>>>
>>> Neil
>>
>>
>

Subject: Re: Clocking issues - need some help
Posted by [EK Sound](#) on Mon, 04 Dec 2006 21:02:28 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.
-----050607060503090306080207
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

I am using various WC cable lengths from 12" to 35' (35' for the HD run) here with ZERO problems... but they are all home made 75 Ohm Canare LV-61S with proper crimp ends. Here is a pdf of the current signal flow for the room.

David.

Neil wrote:

- > Well, I will try this, but ideally I need the 12-ft cables
- > regardless, so I'm wondering if the 50-ohm ones (vs. the 75-
- > ohms that I've seen most WC cables made up of) are what's
- > causing the problem - or at least COULD be what's causing it.
- >
- > Neil
- >
- >
- >

-----050607060503090306080207

Content-Type: application/pdf;
name="Studio B Signal Flow w-HD.pdf"
Content-Transfer-Encoding: base64
Content-Disposition: inline;
filename="Studio B Signal Flow w-HD.pdf"

JVBERi0xLjINCiXi48/TDQo0IDAgb2JqDQo8PA0KL1R5cGUgL1BhZ2UNCi9Q YXJlbnQgMiAw
IFINCi9Db250ZW50cyAxMSAwIFINCi9NZWRpYUJveCBbMCAwIDc5MiA2MTJd
DQovUmVzb3Vy
Y2VzIDw8DQovUHJvY1NldCBbL1BERiAvVGV4dF0NCi9Gb250IDw8IC9GMTIlg MTIlgMCBSID4+
DQo+Pg0KL1RodW1iIDEwIDAgu0KPj4NCmVuZG9iag0KMTEgMCAvYmoNCjw8
DQovRmlsdGVy
IFsvRmxhdGVEZWNvZGUgXQ0KL0xlbmd0aCAzMjYxDQo+Pg0Kc3RyZWFTDQp4
2q1ay24dNXLd
C9A/9NIzgGk+iq+lbcmbJsg48PUkGAXmcWEpjsYtKbBsBPn7OUU2u8nb3Vdy y1IlzhHJqIMs
1oNsJST/18mD36r5//Lrw83piez+wT/+hx9CKye7P09P/vPftNaXjCiNsSpN iN27H05Plgmi
QJ3xJKRxpMSKljhycsJ7GuQlljRegbH2RV2P5Pz+ePpyav3WEJBbQM9jbXC KeO792enJy/e
YLAaGLz/7fTk2T+/Xt1e3nWv727++Nt7EDI/v5kWSS90JNfQGsGGIrdCW1IN rQo7RssJH0I3
JgQRvJaJ1rOf95+v778LCQt9Y6TYkBJBmgRB4WjJ1CRq7BiJIFSASgQS1gdf k/jp/PWTNwKu
RDqodiMK2HAGLUzwruFQYY/hAP+SSsXvzYGkCE5Ry6GADQcJT9AyNBwq7AgH
TSIYwnCthZOR
Moef9h9v9lv1194Lb1zsTDSCpEyngYIXjoycwL4CtVNCw/0ZHKfX4DoDoz3+ AMc0WolgfaxO
uatO+b8TnQjfxEaV489c9zf73/fd2Y0GMIFeEUZORA+jqmCEDLIKKXGS9RwT HbsD7PTs3d09
wsv+97779XX38epWbDWrMV5lkrZTUQmvdEhm1UEYE9UE9jXog/DWSgan6RV4
/wQtyAuKyrda
FLDRwpCwhg60qMAjm2sxKhCvfgBjnc1bVtn04s3T7SmtsNqolkkBayZRC+hA DZEKO8ZDY3dw
zCKCYxh8IJ0Qpkpe8qrff/jUvfr6+f5L98PV7SM5Bcuy0g+VOJEkpJpo8kYQ ZU4jiJ2PFFIM
383ms67zoWk+zqHCCVMeLLxP8zmpmWDdAbgg6be/H6fBtQU0iC6dyrw1gYOR
p7QLMpoUAifQ
AETeGGgcZGca86E838e8ozglyJs+OSkoCBdNOAAXJD1EY2E3DNJljDofTotS JKIRQK0dQJvC
G9zcadhtCSNE9GBDCe5R2RZb3snZSIhGqvVEjOEwkdE8e8IQP7y2a1I20Mds GZ1DirdwFZ3Y
Byms5exUsL7CbBTOxIJN5LkVtkq0HclSwE/DN8nBN8mkTR0xCxN7I9ekbNln qwr5eCnvs1Ey
u1sBNSId+UzVwU+j1IsYIRV7MxYihvNija3Sb0fmfVYe+YeQGoMejDxiCISV WZOyiX5EwEO0

Y/pJyE0FakKmpJgWd4gZDuZZwkzE0pGyAyJK6qgbbIX+4UimH5Hfgk6VRvQ5 CI0Y3CDIoNek
bKHvUIVF7RJ9nJuUEUdQWylQjiUluL2xK5ixCNjGTiUczFhjQ7vfjsy7rz0M D6si3slyyJNm
ecsjrUnZQh/xX5lh94PTKsfaAUw1XlxHHHg+NJKP5RQh3WuU1gjNaX5qj5Bu DsAFSQ/TSCkD
W4W/2USDa2mrHI4h16cmDDRwhlWQE9hXIPsXlSnknc2izG1xUbaTQ98GEJFI 55BbgVlGdPhS
37fTC7e5qLIWSX+UT1lbgJHDfLaY42pGuRZclrXJjZAcOblcSxAI5p203BF ryawr0CW6lyX
x8y4sKhC4eV8ZBBFh83eMIE2oD73IZvxcPoRM860Svo7bqUoWQzRI7sBjpdD Jj0AF0ht9EYT
Ultm0Z/5vJvIXNKSnsC+AlkiMH/cG2eLptLEWgZRsmkVizcOIBKoVWPH3E4/ YsaZViUlmJAd
z5LLtRYq4+h8OAAxSG0wI0ldJyGbm04+STcVCH9HGeRTKtR8l+S8WgbTXrsY ihkcQXQNLht8
RTy4qeQilMxHfrAC3DS24Gz6usHnWg17GxTrjxBvQ25SjPb91eZVF0k9bPBZ TwUhlq1ykkI
xBTWHBp6bTgKFbCvQeJGMBck0/QKXO+qnOQMzrUD4bTz8Nwd/nTehYu30f24 tTVENEGOgttz
l0fB+UKD0oEvYF+DSnNmdZIGmV6BR2goxCfH4QW1WTS0SBKNI93L5ziUT+GA
UI/TJqGND65w
cMmjC9hXoA7opUjZwiFNr8FjHJDauZ7XyF+WU1XicPbyuZM3ny4utrOwgiJi Nyd/b/XgUHwD
6mkC+xrkoj8SFYfK0yvwGAvegLQGxYrJgcUv+75PBBRKpuh1c3109Vfnndza sBs0ytiL3CIG
n2+OR5ALRe3yXSoOJV80yBWQqzm0EWU/DR+tGluwuvuZD2bzBcLeKziVyUZAL
hAqcYsmipC01
ZBimN1YooObbWJl32Uu0KtaHZdCgkbGVVfydavABK4xDayvwqaSYq4YK5DOT S/hFSVuswFnX
O9taoYDcMhqkh0QYfhpQyy+D3HkqlbvZSbcKfMgKZWhjRRi863hBKKd0NL6 VUmbrBDQoNLB
iSggX5AYn1tVj1QtNXq5RZBbCBd9LLGByPsGXLPC4dBkBSVKjDo+CXJZisU kG/AwnAglyRt
qFw4/GoZ+e0KmKHhDh3cuNlcwdXSY3G+DRhpuMgnhDfsYA6RBbSotVDylOjf TI8vPeZasaol
CMoj1deiJrAStUjqSRZDeUrO6NZiBVy12HxoQwOFsBnuEioQ0Xdl74uSssUW U026AjGwC9tf
GROqZ4tQPvuc/9jt7r7eXna7L18vr++6V93Z9cfrL/u+211/vMWvN/3dn0/J roHSrRA6HLK6
1AiKJE1gX4NSCT9009P0CjyWXYldAWsobtX98uPJs9dn754HKZ/OCdWmMu6A
UwEbToafk+MB
pwo8wkllvK7DcOI4rWOpe+ixBLljBvxAKGECdvnGhGhTdROlyxFoBPI+AAkv 5z2JcoUj0BJl
ymBJMyZDMtY24G4mvqSBduiQBpzkm1LUeTgGYzlcQCeijXFV0mOPc2MFnALF 5WtjhQKiNojk
csSXXKniFC+ChE7CyWBb3SrwISuUoY0VeLN1fqivQJQEkeKqpA1W4KBG6MIQ YCFiYrHxKZVL
nxFcpbE4nyOOzkUj/0OqkgYGkKfkd+P59IM0UImaa5XiJ3pMj2BYi6rASdQi qU0W48sJrk0c
SgZvVWOxETxisYX51iOZO82gFTYOxhIbj+JnStt0OP0RFmtULcapRU1gJWqR VGsxzWFVLViM
+AkcBVO2mMrdKlp/5QcXwc44smbEBnsdXXIWyo0ro0By1sZm5YI9ZuWFZD+s zF9AmGiblQv2
8Mrl6ZA3hQ5WjpyTYqtzwYr3rNxKsAHQJSLVoDRc++ro5fnuxfmrf3V3n7vd z2cXb7r++vbq
/qEPEmbFUV4SP2eldPPr3efL7nV/9+HTN66CEhZpe2hz95f7L93bP75cf0BZ 8W3rRMttyHD/
8sv15dXd4QLfdoqRloUKyKZWBkiN6QJmAlFiISPE/FbLrw7ojxbBdA2rg1w/ 7/OhQ+sZrcyX
kn7oa7kr90GqFlyStOHijL9v8lbf2NFnueGbGa3hbxxMRrCvQW240Mz33uP0 Cjzy1Y/TQIMw
nTJ8+yr1ciXGI8baMN1dvHi7tRjxZDMoa7jdknHTCzww7Kcwl4GiV9jczyb plfgEWJ80cnv
RgodhuLhuRxlru/bj88lclgYy1QNpp2iwpYb1H0SHr5MnecXWGP2SDUMd4N 3cF32xDyKE04
+bliw354T3LE+gpDyjFGjITS3Ao7RglVdEDPhNliaLedwyxslGV1QHbHLgH N/mVBinNOz+B
fQ16fhAyR95S50PTmwUXdZq/aOHH3fx9Fd+cB8dfkjTggqQN9x9sYxMcc+PP MHlKSMc66Ars
a9DwB6a5OZ2mV+DuCVoY/FVJarUoYKMFcN4Vg2+1qMCtWuj8iZZHXTVqwbds
I9hXYP7OoVIC
sytsow4weeNr/OlnQAfQ+Nol8kNZINN28OwK233791Co8FT6kKiywwRCrnf5 ikXn24S4Avlz
k86vO9UZmsDlz6nmQzlmGDDS/OUU8Vt9vhCeQmtv9U6tStpwwzOtY/i+L39Q pMnhLFozgas3
PMvzR40NKiqbPz6vQCM0f+XWL01/Kg0Z+WPJgYbnF0+awEfQqOePGiuN0Ye7
gSyC5ORbGpWk
p9Bl16BSlc3wDiwK1lcY3wR6uGX5xtDYoXrwAbq1nElSfb2Xv9wZsfyZX8u1 0mfIFnOuEctB
fF8qsV3kz7ma6MJ5N5eD6ZelsSi/g+EJFg8ZW5kc3RyZWFTDQplbmRvYmoN CjEwIDAgb2Jq
DQo8PA0KL0ZpbHRlciBbL0ZsYXRIRGVjb2RlIF0NCi9XaWR0aCA4OA0KL0hl aWdodCA2OA0K
L0JpdHNQZXJDb21wb25lbnQgOA0KL0NvbG9yU3BhY2UgL0RldmljZVJHQAiAN Ci9MZW5ndGgg

NTYyDQo+Pg0Kc3RyZWfTDQp42u2bX07DMAzGewskplkn7rFD8bhTjCNxCySO
wcOeSqSOKMof
23HsNkn9yUKFIZH8+tl1srKuJpNJXW+vLy78gY/wJ9Fppa/pOduByWQymTrX 8vkjHoNy6PwN
VZsBH27YaVcwPYfv94sLmNjyv87KYZu+j6wxnrO4X1ujbw6eBuz8xrwYhUNq gzTOwMHywh+g
ecGuk4lclEwb3iP08kKWQzrabO93Eg7wqwwO6X0zS7uT+kC8WGw/0OvD4Ryg Yv7/J3bli6pq
qccBXRu2cCCl3tEc0lvF44D21eH2aYlDaVQRB3QWVdVYcl0fTZ/tB6m95U44 sOuDFAd4/Kij
Src/Ogf0fhE6XJUDGjCHbOlj1leSE+C+WowDWITdq6p+8ARqMxc2Cb/zBEPV D7y+2k9/tzPJ
HySbQ4uN0/ED4wTYUswA9JMieSHLQc8PxxGXC9BwoeXFyP0zDgfiHWMkJP6oP
aF6cgYPSpAQ5
oJ0eZbE5OoeqjY4dNuHZHHjhODS+g2oYB+PA46C6TC5xXqeTcTAOdA7pBpF/ 0GKyx4ZRDtot
00Aclg+E3w4xR9InR7R+kr1teKzCx6WANd36u9D7h0E5oH5wEDYO28EzCl4a qE5Gj8+VMiLe
rs9xCH/dnTBWnSQ+RkjHEfLoOA6cOhkmSB05UHPmBaApOFDzYp8+6vGxVf4J
rpe8mK6fpPQP
sh/v1nawe4LVe7xWz6tH9dWmw1Z2ty/KNbLLZDKZTKZ2/QGH2tS5ZW5kc3Ry ZWFtDQplbmRv
YmoNCjlgMGBvYmoNCjw8DQovVHlwZSAvUGFnZXMNCi9LaWRzIFs0IDAglU0N
Ci9Db3VudCAx
DQo+Pg0KZW5kb2JqDQo2IDAgb2JqDQo8PA0KL0tpZHMgWzcgcMCBSXQ0KPj4N
CmVuZG9iag0K
NyAwIG9iag0KPDwNCi9MaW1pdHMgWyhfyUEFHRTEplChfyUEFHRTEpXQ0KL05h
bWVzIFsoX1BB
R0UxKSA1IDAgUI0NCj4+DQplbmRvYmoNCjUgMGBvYmoNCjw8DQovRCBbNCAw
IFlgl1hZWlAt
NCA2MTYgMF0NCj4+DQplbmRvYmoNCjEgMGBvYmoNCjw8DQovVHlwZSAvQ2F0
YWxzZW0KL1Bh
Z2VzIDlgMGBSDQovTmFtZXMgPDwgL0Rlc3RzIDYgMCBSPj4NCi9PdXRsaW5l cyA4IDAgUg0K
Pj4NCmVuZG9iag0KOCAwIG9iag0KPDwNCi9Db3VudCAxXQ0KPDw8DQovRmlyc3QgOSAw
IFINCi9MYXN0
IDkgMGBSDQo+Pg0KZW5kb2JqDQo5IDAgb2JqDQo8PA0KL1RpdGxIIChQYWdl
IDEpDQovRGVz
dCAoX1BBR0UxKQ0KL1BhcmVudCA4IDAgUg0KPj4NCmVuZG9iag0KMyAwIG9i
ag0KPDwNCi9D
cmVhdGlubkRhdGUgKEQ6MjAwNjEyMDQxMzU5MDMpdQovTW9kRGF0ZSAoRDoy
MDA2MTIwNDEz
NTkwMykNCi9Qcm9kdWNlciAoQ29yZWwgUERERGIEVuZ2luZSBWZXJzaW9uIDku
NTMxKQ0KL0F1
dGhvciiAoQW4gSW5zdGFsbCkNCi9DcmVhdG9yIChDb3JlbersQVcgVmVyc2lv biA5LjUzMSkN
Ci9UaXRsaW5lIDAgU3R1ZGlvIEIglU2lnbmFslEZsb3cgydy11RCkNCj4+DQplbmRv YmoNCjEyIDAg
b2JqDQo8PA0KL1R5cGUgL0Zvbncjw8DQovVHlwZSAvQ2F0YWxzZW0KL1BhcmVudCA4IDAgUg0K
L0YxMg0KL0Vx
Y29kaW5nIDAgU3R1ZGlvIEIglU2lnbmFslEZsb3cgydy11RCkNCj4+DQplbmRv YmoNCjEyIDAg
Q2hhciAyNTUN
Ci9XaWR0aHMgMTMgMGBSDQovQmFzZU5vbnQgL0pHSFNMTitUaW1lc05ld1Jv
bWFuDQovRm9u
dERlc2NyaXB0b3lgMTQgMGBSDQo+Pg0KZW5kb2JqDQoxMyAwIG9iag0KWz3
OCA3NzggMjUw
IDMzMzMyA0MDggNTAwIDUwMCA4MzZmNzc4IDE4MCAzMzMzMzIDUwMCA1NjQg
MjUwIDMzMzMyAy
NTAgMjc4IDUwMCA1MDAgNTAwIDUwMCA1MDAgNTAwIDUwMCA1MDAg

NTAwIDI3OCAy
NzggNTY0IDU2NCA1NjQgNDQ0IDkyMSA3MjlgNjY3IDY2NyANCjcyMiA2MTEg NTU2IDcyMiA3
MjlgMzMzIDM4OSA3MjlgNjExIDg4OSA3MjlgNzlyIDU1NiA3MjlgNjY3IDU1 NiA2MTEgNzly
IDcyMiANCjk0NCA3MjlgNzlyIDYxMSAzMzMgMjc4IDMzMzMyA0NjkgNTAwIDMz MyA0NDQgNTAw
IDQ0NCA1MDAgNDQ0IDMzMzMyA1MDAgNTAwIDI3OCANCjI3OCA1MDAgMjc4IDc3
OCA1MDAgNTAw
IDUwMCA1MDAgMzMzIDM4OSAYNzggNTAwIDUwMCA3MjlgNTAwIDUwMCA0NDQg
NDgwIDlwMCAN
CjQ4MCA1NDEgNzc4IDUwMCA3NzggMzMzIDUwMCA0NDQgMTAwMCA1MDAgNTAw
IDMzMzMyAxMDAw
IDU1NiAzMzMgODg5IDc3OCA2MTEgNzc4IA0KNzc4IDMzMzMyAzMzMgNDQ0IDQ0
NCAzNTAgNTAw
IDEwMDAgMzMzIDk4MCAzODkgMzMzIDcyMiA3NzggNDQ0IDcyMiAyNTAgMzMz
IDUwMCANCjUw
MCA1MDAgNTAwIDlwMCA1MDAgMzMzIDc2MCAyNzYgNTAwIDU2NCAzMzMgNzYw
IDUwMCA0MDAg
NTQ5IDMwMCAzMDAgMzMzIDU3NiANCjQ1MyAyNTAgMzMzIDMwMCAzMTAgNTAw
IDc1MCA3NTAg
NzUwIDQ0NCA3MjlgNzlyIDcyMiA3MjlgNzlyIDcyMiA4ODkgNjY3IDYxMSAN CjYxMSA2MTEg
NjExIDMzMzMyAzMzMgMzMzIDMzMzMyA3MjlgNzlyIDcyMiA3MjlgNzlyIDcyMiA3 MjlgNTY0IDcy
MiA3MjlgNzlyIDcyMiANCjcyMiA3MjlgNTU2IDUwMCA0NDQgNDQ0IDQ0NCA0
NDQgNDQ0IDQ0
NCA2NjcgNDQ0IDQ0NCA0NDQgNDQ0IDQ0NCAyNzggMjc4IDI3OCANCjI3OCA1
MDAgNTAwIDUw
MCA1MDAgNTAwIDUwMCA1MDAgNTQ5IDUwMCA1MDAgNTAwIDUwMCA1MDAgNTAw
IDUwMCA1MDAg
XQ0KZW5kb2JqDQoxNCAwIG9iag0KPDwNCi9UeXBIIIC9Gb250RGVzY3JpcHRv
cg0KL0ZvbnRO
YW1IIC9KR0hTTE4rVGltZXNOZXdsb21hbg0KL0FzY2VudCA2OTMNCi9DYXBI
ZWlnaHQgNTAw
DQovRGVzY2VudCAtMjE2DQovRmxhZ3MgMzQNCi9Gb250QkVjeCBbLTU2OCAt
MzA3IDlwMDAg
MTAwN10NCi9JdGFsaWNBbmdsZSAwDQovU3RlbnVYgMA0KL0F2Z1dpZHRoIDQw
MQ0KL0xIYWRp
bmcgMTUwDQovTWF4V2lkdGggMjU2OA0KL1hIZWlnaHQgMjUwDQovQ2hhcINi dCAoL04vdS9l
L24vZC9vL3NwYWNIL0MvbS9wL1AvYS9yL2kvcy9NL0UvZy9ZL2gvRC90d28v emVyby9SL2wv
Vy9wZXJpbn2QvSS9GL0lvYy9rL3QvRy9laWdodC9PL25pbmUvc2l4L0svUy9B L2h5cGhIbi9m
b3VyL1YveS9zZXZlbi93L3NsYXNoL1Uvb25lKQ0KL0ZvbnRGaWxlIDE1IDAg Ug0KPj4NCmVu
ZG9iag0KMTUgMCAvYmoNCjw8DQovRmlsdGVyIFsvRmxhdGVEZWNvZGUgXQ0K
L0xlbmd0aDEg
MTA5NQ0KL0xlbmd0aDIgMTAyNjgNCi9MZW5ndGgzIDUzMg0KL0xlbmd0aCAx
MDk1MQ0KPj4N
CnN0cmVhbQ0KeNrtc1Vc3N2yLO7uziADBHD3grt70AkM7k5wCO4Et+DuGgju 7hBcg7sEPeyz
79n5zvN9u787/5epVd3V1b1WAymk7O1cNDwdQGxMbMys/AANsC3IWQnkrmZv
a2IHYGV9P2TI
QAUCJZxAJi72TvwACXsnkA1A5aMUQNLOAmwHQmVjBZiDzVwApqB3iMryLz0I
E1sQgEVOWkZd
QYnhfyuagz6jsqiYgP9dFMD674P/MQFg+4sVTvycwB4AfdZ3B2zvge/f/wz BLY7Mbe3s/H8

d7iknZm9OdjOAsDOxQ0wcXly8XyPYntHXABvNgDYzhzkAQB5mFkCWJjt7F3e UwAOri6+gM/2
Tqjmrg4AHI4Ai9K/jv4bsbHxAfHc/8L3kiygf7CsAba7f7Dv0Pwf7Huw/X8g BzuAxdnBxOxv
Ove7tsQ/svkALLb/yH6Pd/gP5H2XVvkP4nvPNPIHKCeAxekfQlwAFvA/2Hfo /B/1856q+NfC
e03Jf2RyAFgs/tZ8J3X/Qb5Xsfyb+T6nj/9BXO/2XNz/Nsv5znqBnP4e8L53 o/YPrXfe5i/5
7kn7by73e+MgJ7D931HyvPuS/Yvei0n9NfleLv53Mu+ezf5R513Z+h+jel91 +avzjf/Sf1t4
50BgC8t/8O9ayn/5dym79zf+9+B9Hs7vj/l/4e9zlv/b07tl9b8m3zmxvx2+ l0tPB0vQ37fD
9T6fz/auf2+R992O1l/n7O9ePf9G/+tKQW7/yGdjezfr/rfCu1lnGxPnv/fF +56i+Zd/j7b/
P7387/X517aJi9t7ALxZ/71nv97v8xcnZxAdi7/veUgO/P/wZ/BNiAACOQB MkPNZ5oVbM1r
Ue6lmudtrblxxrFghApjqWSDdiLoO2FwpO6PeJZDAwY3lrmHc09uwXKqvPzq hD54KRbE3Glp
7TLtZ/2KMODoCY1eWSXJkAbK8FtEvxCfuy929KPy/cJ/g4lm54OG0RxdwSr rUs4MvY4TPRu
5QbHSPpwq6eMaSMclScQTdGS4c0VXIpm+kafSwp/jmKtMxeL0nKYUyccHey fBHcm3bk+Dq1
w2+O4r5ROwsxFMPKcL4BEVQNhyrqNwVpNXtvDhrwlCLvkibzs3t7bizZw+7+ TjraKhxqAWHQ
Ug+R+KMmnMPqsXmB0Lnpyms48ZZRjeorzTZFEZdrz5DFr8MuGoW0Jt2kX54P AIK0Wx8SBH0i
Gche/2hdUxjNKweWLL5mqON6IAKgtuMtBeqtamZmrTuPEBhwyB61iRwXBU2O BCuKKJ6yL+/b
6yZy+TYKMhsPcfjB560Croo4mBGcS/kycUzDcP4lp1dQgguKavSWy21j1U+T RcgEjxFALuat
u/sc8a9goS9bHj+Ex0l/GGjV5U0QNPULD/ksw560ZG7cijY6jLDBhkizeOQb ROg1mYza9Q6q
CzOLFWAvH5A6FRzs+iEI530ZH5Mord5Bx/yEBEQOQ+LV+gqo4rANI9ZRr8hL RWjurZ0EK0lm
7qSYhmYywl6lChOetittOy4wRO3Wje3YogIxnRwpZEHmSldUo6hyN+KdtJf ZJ/lw6bHZfhC
65h8Zw2p1iOaaKJMJaLG4Coal4jbniiRsjwaPmBBMyZ+wHy0/EhDiRU8PkJH XVWy1UnOOzGH
Q9uzUJxUTK8U6Zj0ID1Ex5UOW/+Q+YBgCXBGXrn/8+0x95pEwB76xvjZR8UH q95eWPt1gbfp
0UjHbumZCW/KqrL3s/JT+2q255+PGijYypoVmLOH2lhqxdajS2E7Htj3V8jG bKfL9aO7h7IX
4wCIV2+Mm6EavRGWManyZIXOrlGLPM2Trl0IX07/6tfrujJbxsnsyaR9Or++ pcnFXA+Ocr33
4Ns+VweYH8Eh5hhGVW4nPZjsCnOO0+AQCsK51lg5A4B9tczhaf8qTguA98od gC+ba0PjaSVG
SjV70R6SRCQfMJvtoQQxu2f5GR6+j4g9eFYBakzqVBZxGSa5qEBn/0fhd/Pj fUjnvDyKfJh
byuTUPpFakwxvXxgiXMBTEtThHZF/nhDU2pc27y3Tfv2naZyCquhUVdw13oU 52E5BP3VANtZ
EYEPGnsXISmUkdv4lnhm/iuPEmkh/QbA4MAyfR3GTpYWQJrZkWEAWVdZQSu
P7aoLz9FaVQP
09gC6M5SSRbx+LlafQtKgmujtZ+WoXpSo01dmTfzn1NxaEUNHN3lssL05jSg ry0zZjGrq2Dv
lxsW1hKKni5K7tSEU3qelyPdaAil39mOpEm/KG3WhOPxS4JWDLdVpoa9a6w Nt+NeCtOj4K2
OHd+s3v+tKtD7OdNiR41a5/FV+nMgaSbZY4tGp34mvmLmlfTX9/3JPHTQcBb 0Jko8rZZEMk8
KVvs9wwwg4Qaz2/PBJi6qPDLTYTtEyzvIj5AZUeopFHF4tSzqsZrQJtfkiqr2 jCW7vWrPVDKR
UjbnkLdpukgLWwuP0GLMg7A02utEhB7t5G5Ucg5+/M1bbIGcxF7wVCgwzKHJ x30M5UmNr7+E
eB74mzVGm7Ep4kZx7HPSrMIJMIxSRPus02aCVci+E4poAkYDEWUSm5elqkTV
NSxDUTXh6sOo
VyAScku5ia4IWSnheiiELZ2YR2Vgqmihn8dsB7t03w5cHs99mAphTxV0CPMD M9Lwl0lviOPR
PxT8tSiN3VAxbMr04ubGYRliJLq8dfvhI9sxaQ0cbGQ5alwmL+beYhqkCWSb 0o0Bk+0o4bBC
TzucDyfZHfg65/cN6/jotgGc0JV8pxc3LT1ief0YD0NjfvNqwUKuOtUaMXzT VeA16tmgzQa2
iNmmOdgSOLP79qLBi0KLLgaE6PFwfvjZ1vQXdnleM3XIIRePxl38gXEF5ONe rrUCtUrKY5Kz
NZIR9aqPLhRNAInCtVisuA84H9A3+UUf6x+F+XvX4hogduFXmdHuDMMvS2LT 9S06C4jAtx3y
rdUCRf0NrWILUhm613Eb0mKcNs1l856CPtHHHApj0PTt0zXs/Z7Y4z9DH17d 2TUbhdRtjlpL
qr3cXAaF/4SvPLD8rldL+mYQQ4UGrZ1W5jVHvetxq/jj5U9vt35YMulyKcPb MNSs+XDahBi
N70BNXNZBkk+5g7CPcZLnhRIDkr1BxXEdda61JxsJaYu0arLkUMkc/Rxf+Ue 8dLob0/ekZXF
3oRk4cCd1W4ZOL2bW9Q0O46LCSJ2dAbTOfpP7+PH0MjzxY6dEa7hdeKwZ9a
VhsINOXH91+N
Z4S0GEXEIJldpK+CjTS8PfeqLp0PQFu+dwIUhK/mNlaPGPFD+mHR2Vke3Dvi wTmpZfTCZyi0
IVnrMIXPCTyS+N5vFmdu0nPQcsHk91WVZ0sUFgoL0H2DCV43z6yAXbcbMKSA
Ax7io1tAVmQU
lq4l5jA/zPr50/jDQjfyIho6iyk9d5eMtvBVpuifDd8Lleii02kWTokW9wM oA7hAZZ/Q+k5

WmlJCVc+kX5VNY49hrMU8Tz+hHFJrKfA+MfoCTvwUBN7s6fon1vaHZPaa+3l GQHz5ptJj0vu
pkfXSCHC4rR14qGKPYNmOzRRXEP0Admc9k9nOfyuVy03AUVGvJPyX85BFk0F
ZEppFGNDZCeN
vNJQapjR89NkhXZxKqMpktcmtDykh9j5QGFA+7iW/XcRU4NydkSiZFmUZfbT aVPNYE3Nkoqv
b6N2U2Q02VBq4IYGBQ87MxWDm+XpOGSHzc9IEuKqg/1MDWQ/sxlc8skhzyY6
UFGi5l6X5o+S
un8LDvdc3aT6CK+aSw0CdXr8rEBJKAQQA8WvmgshxK8vMUkM0JLxr7Jjct5 Ufnl1+w5Hbth
67b43Dt/IPRjUvncPwPW72Y22YaiHcMNOqXU3b9EXH61mfoprokVT5Q8FVTV YfbqZnY+LTc0
/7rKPPTlkj3d5JAdeigfkeTh9vREJeaDmFZr2bLOPUcFhN2bmlQQ7gdmsS5S 5FdZFPjsgS4
7LJI/TB/nPYy3oq4haAUNF+7fO7vDOQT6GnywXa3Nbazm166ZKKF30TdPBgZ f5gUjkB1uFMC
kY4TjDww5jEssz3dHetZ/FBKRzAUZVa6ekFys3rMxZYb+LrQnylVzErX+M86 kJymwhxB9Ew5
94CMZ51fdvj45r0WlopqUziL5mEGd69OQbSFzNGsrVZEges2/0NYugkuz7a Z4YpNW8r7TIX
kk2NJlj9RI9VT8LozWE7y/puNz/jypP+FGzo2oxxf6Ym4iKKQ+zuwUp5Z3z zTj8uXqkim0P
l2wqdkorpKvXaBDCEn+DyUiEfElKzakqa7jVv6jzVb1Xu/PYcyCUF6lgnbU+ GHKzEc+pNOB0
CqWkHgDLGw+/hEUwLZ5++Vxxdw1YIQDNpjj7cQJ/ertl5PHs+Ebrtdxjg/T 9wVMjrVdzN/G
0iJCz/1HdzU3lh0DdFJHTfvJfvgKwBSfJ0W7D5AcAhbB7bgJHdCFxsQ7jli3 rV+04dD0xgiK
29F52qxvceCBxQLhLIJvtVpNHsP77m4DA/gNI5puH7IK3ELBJR5dYKMMnLNa c+ny1adLX002
zkJYM90a+VksF5HSNZSvru0JIsRYS1/kyZqHehc4tjxtJYTxKVwE9E9f2pw w9Mc2Mx2MQzt
tgTQyaG9Ptr0dQo/qOeJjHk5vNA0T0y4FH+H8X/7eeM1HRkB+L0KRH/t/BF6 cCL1nLdfJVP
tBBh0eUffVa4ftVtw3Y+NXUasXY2TWiUPgGnLv81Qb1nKkLN1ae26FAD/xx2 iFfo3PLsO0R+
DO28AqNIUHEh4KmvHUQbEEExGY6L/5XnWu73lvjcCCc+vhE9QOjGgvyf4G3FO
N+Q28G5GS6rl
hzep0hXHsxFu+qMm5SOIDC+JpXq/RPiNw5cAemzcAgvv35bf15J76iTWTtja 7jhNjbmaVjph
yvEC9hQ46tO0gY8LzU1YKcKScb1nDPDJjEY15SJ3sB9ftm/0hGsg6lNh99AF RazJRkQdSRUR
SGIAD+ibet1xhA90jiUsABHN2ugtB5jf6G+JvUJhQTNE5B5X9Z1OtY7DfEq mfmLToachb/V
mGdfVk03xEzYBt+XQ+wqiVx7gRkTBJKawqCntF7UhkBL63hVz+PXlw2NyLR 8C/sA/LjuWxq
Q1KftiywOjEYVHYQ1caiKg7m7eVX/8w4NGI5zVG+xAfLVj0l1GvRAxWP1w 9jZzXghTk/XS
4XWP8Z08onjcM9fybYQMu2UtXx2PBBJo30IHEbLrJWYhaOUpZzC3xkLn0loe X9qcD9g6QNV2
l1zCHCW4LG99caN/ZGaYJVfYTwYNXOG8yTfTl9hnd+rRY3jsslLiKex0PzI0 ncSedAQN8gXc
MUnmqbdRISrk04Thl5bUw8jZTL8qZVbjqLrKsBJBriWr2rHshvF8y+MW5CQM RMvYCyO1C0il
SUhbFt63OP+5XYoEyDStirM5B/MRQpQnFvCY+Xl8sL2Uxhu7pcwhwHCgigpB 7jVz0dX64Eh4
Wzml0qpqUsHBVckqEfQITSOPP10lxOUI6zMhIFkM3ml5almUgc+nBCBf7Rb9 b/PHOzdjE1F9
WyqgjPd/eOxIFgr0aabSXmV88H3tY4VP6KBk8UrloSQTFtJmPJJBs/IOvMh3 ohpjG1aeXl3A
0muGFcCkI8ZcyPs+iAPK0Td50LTFT/k6q0+jn2gd3liXq4qRilwufBiZRcd fy1DT+C58JfK
Snfbrozce/ba2XO0YZ9r2noOhAKWVA78ZKLSIm9MIOjll0yFq7ANV7h/PIC PbjnsG53luRT
XynsuWSqKHao1xUq/bv8yElzzxk42PzhzyeLtfzfv6Y/rz4PPvE3mpjz11LN 9wzpVXdugSXI
TwXnFRTj+EPVXDDOVzn66F/2MxULtemWQWr/iQTCTH4wpEGsru2mZuHEiHJ 8Jm+LX5u5Xit
MJpDQTN8w9j6yNd0XTWHbxg7DaAOgtm/PIpjcxpLkUvSbRU7yS9iAMAMVUIz d9CTM3+ozJqS
HTn6IPGzlr0v2M1m/AVXxtSPnWGbdMf7W117oiXcOEezl/JNAjG7nM4ozn63 +c3B8d510EDX
lubieFvjxuTM9KUCvL/tqm97+s0td2+myzIMwt7xaQYSmgg14+yJwZg/Fre d3fJ/YtD5vLg
Fp5snueQWurgPt8rj4ojlyVtjo1QN+fNM5FgFNriLpkZdgVOyyvVz10DD20V WYc5t6zeqTh9
pEQ/90s/0XNaEcHtL2JG19OEPLihQ5KGFJKCU+ifYF0CaUslvPjP+ceh7WZ nzu/1PPdmhbR
M1VEtgFt/sIF8Lo4KgqKXqbevTITGP+tkbEtRZW9IQPW8cGeKhUISwIUXIB DGRth2J/I04w
9TJI8+t9K7pn62zKxOp0c31IHVVehU/bKzhJOOXDZFxAjEQvi0rYag0mCwQG 7E58KDBxqqnK
gWoh5WJasjb93tP+gy3X6kfqIxf6VMarhVUYFD89yjTqU3DHT/370vAarDXa 3buactZPIsOZ
Bz+OxGVnv6Z+WJY+EGGcWtTFuVQbWJkeIFJ8whTqn7aVysk0ULQaPraVUIkz
+ZB6ZBuObXXu
YjiBbKzqssfkVWmTh+qYh1dJ/6rj6f5jRYC8iW5pm2VEoiCkxhSVAS/tJ6F1 Y5EFUHPcerN/

AcchS0oE6+c5fYsvHffdSOycNWtglvts5dGNk/Cf63PRoGxYmjBreU4jVP/L /o+KT2INdDCq
q4svPKoDvs6J92tFxngezRpUujrziHt3v8YfCZvb8GopsH0gnZu0l+LTo2zA Pt7YTWrtB9HK
Fuvc2HjWlqWx6PfYj2ENtW3nGfvlm309IDQU3lhgcekaqZwOZG4ypaBWriBA PHLuPv6nOB4n
RPxL8xln7jVnXZPJIS4OD2vDypBpu590IBIMBZ6O+s3VEuNQbvNBZA04kEKe iHK5JUfRd3Ux
/rc1yff+2dLRQ4UFrqWAjucCe0uJmR5VR/Fllz4vea1YojTYfSCq49COic2F +LUjDt0RpXjn
FDH0cDmk/tb27x20aWdx+a3wK99iBSwyKfnxxuG2+biTajXERVysEiP3h+po 5jHib4wg/67s
tNvQ7aVXgNHUd7WGHfQv/tHgoRD8PY9JPSOOtKDJWC39TAWI4bVKAi9BLW3p n7/wpcvcsvfe
emA6MPfdibeahDRfm5TjqWuklw9cirOhTx+1YBbG0aa3enDKLOOvklwj930i +ZcrZW9pIHll
nWx7/GygijzEloVGRf2v6g2ByJq6uX3h50MECsZhavF52NxisufHs0UHB0M2 kXrj7Lm44Yo/
SBIghMX30pBzCJ9S3q3hbfpdZeqmqQzQO5nSCR3v5i3U6z3Feo+TvfARrCiPm SGBvRAh+oZdc
rEMGct/DGwCBHqdNO2qZ+vJ007A9rC/iFXC85rZf4jZOnZJIGHIUToiU30a/ KZwUZRdiDb0J
b73Nvdg9dEchQi5tP9n40a4scS7KHx6yf8D3lf6W+yd4cylcNPdFiH0upxuT 310lhXUvTQDC
iqhs9c9pgZLi+BvC11C0C10wN01sd0+oMaBoXpczu1bN9LR7AnWljbhuvx9r su5weempjZNP
NENa8jRnCFkTfw6Fg6fmblyol8/scvngTp/9LF14SCQVmsE+5ymLddnbL8lo IH60vPmwjCtR
tIT6+1e8s3l9+Rn57qyHi1iXAKSSv97lrM8NRmaeUPHiLFGOn2+RySYVTDsk f1/2DqCsXpph
OGa4cNG3q0mNCrFh14JEjg7nuPqbfKETSx3F4jZ3YABDJz9HZWT7WtmF04EB Bzt3J/4hch9z
fUNBs5IH2jldHdxKgB76JtdAXNH7qcPIP7kOAx2mRhOVIOBAQGpXr7epyJIH W1b7W0ew6UHj
nDcKLbqU90hgXjPHLa3MWMpJ5XEKAgt+dz29iNNKTDMrPkX87Z78A8pVIUJ 2B82Ar17tTjd
sl2ftGhvpLrQu7nEBxG+u9spMNfwaJ3Yhpc8iYa+xm0Ud6OQGPZH1mkdQtB 2M40qV5fAzFz
MNQLerQcW09Yw807R7Kt9enCgTuPryzXuqlPmdhhzgfse1+YFz6IXI0rqjo RAf4IW31dLGO
83X1JZwMklIlg8pp1gpfE53Up5l1/51eyi0W4pw05ZRsbZo1uPDjx9z+9AqD QDVjgoNTOwe
Fka5oxK0sJDvp9622g9SErwUTcnSZE4ylMp+VDnKgbv5lQf6QsCvQVpmL0Fo Bm1GH5Ea4sVR
tNHby4iokNYFhmhvfgzVgZ4FSJf4a/FvpYI0D1qHuhjBYDWqJrxufDF2t/KS +e/Pek1bSYQP
mwVKLvr91Oe+dSKReszPvN5WjC8eKT3kVup8XusPZEw5eeHU7iKTOEo+WZY8 OyTGk7Jhpjcl
wWC/D0zNsyVtOJDI53yxxHvNKI0QFCIfZaiqq2kFI0wG4vphevu8yPWSjij6p byTq1qltksLa
8N30S817pZkTUGSUM9F7ligWVL4xkqfcCel4YbsvehoH8E4loRk8XuWXsv/u W10Q3EtKQRGi
4W9DFPV0EKYQ35/E3dX7vdmrfCgsTQt/FrbX4OWI1ZfPZBYtrnEGixagSpNR MBgCR8mgkv5m
G1nYHIVvb+fAyfNr3EeGFA75RrfatCf1nfZ00pQR9VScD6n5uefByz9jor+ gA9EZNhG0bJi
1uXHukv2YSfrHSoPn0sGSoidNp9Z+ti7m/x+5MGecWKg/FyAOz/9ufjowP1J n4bJ62Sb6Ag+
kF9LiuB4fYr3BdkQn/aoW3Jr6qWukq4xQGY7323jzhOZUpkyCnp94k9viWqr RhzaB17sOslk
niqEN9PySPORuYNP1yftQ/MFMunE63ZmCeJ5Ch5KQ9RUF8gJI1O62UnAus N8yd6ipTNff5
4ZXQy2ubRTCsXZxJ0e7QPPRzDhNgln+d25QZdl6Guw63UiOVAqlr/ZL4UWKm
xmQkmQxhWYxZ
D5Z/iSh/J0qML9opOJLY46nnPfx+MYIwmmIzQkdQu960PrIEyQ/idRzJaqiA ERDPyXZwKPqW
3LUXwnL/1ms5rCMmEV8luLABowPbuKrbOxOzBhtJPSWwPk8dNSIRAgcV/yIK 7kt2nWvtrKZz
rA3UVw2mLkftTWYZC2dVTrT4SThgdGkB3qq2wGEnFla3iflGpTzBM7o5Jb/a 5lqGgk7AxR5H
QDa7fFDwNjXJiU1Ebu97vFX8FPV4K5hKU7+U/8Y47fu8gjVqcU5cE5LAv7aR 3Tx3MjQXPVMg
ey7rRpHOHJDSw/MEQmSMSyTPnV9HT5CLcwhEMfXb5sHcmxA3QZGG6kp5Mp3
6a4wWU2DODF2
ME/OJb2jsKl8rb1FmVxaqGUHHmxv6wOpA/JgvmpcU919uYwCDgV+XlqYv9Xy
edaLXWYL0Z5W
jli2mcbWhiRA9PVWmIXx6dGHMlyrMdW04TV5y4Xst0J9ojxWG9Lw23w+Gzr1 0g4wLD/v7Wt2
XcAiEsNIa9Fzsuz2/sG3QURP87ptXik+otbZkqkwyj1njN0ti8/i8IZFCFR3 LFPTXpXZrYh5
nnHVYgefoNcSARDVMDsAbBx4Ji/3Wm8Wx26USCpsjhwD3liR37YfQOYUM0bf
Yq3GEXNMCPUC
gNhaw+s9Ykp1lc/0aKjA6ZiAdJrbjtL0LVKNBjG6bhRht7D7NuTLTt5CIQsO OEIYldhZNKzQ
rIFDD+gHvhjz8dpBCVcaC7D7NeTu16qSOc/ll8Xm1zMQDuKg9NpDpD+PYM1D
V6ZVaCVOHeYg

ozs5mUFL/EvqET1TwyS71Dz/SUMYrQbx+FrQJFqold1Y/0iCnGjjbyObxYyn ud1uHNXu3JWt
etAPCqmKkEusHZsEOS8j3/7Vj2CmXKWkxbx4Mo8uyzu6tRHtbxy+qbE4tOXH QA0yYtnBltdz
odRr5kZJg98PU9BmKalucFGDHvK0WD9dE6LN8BcW/JMtGJKkqnZSt2q3UmA0
vhLWzSq+0OqD
0EvPHQt25N1h+UD6tilsDRew128qvEaGf7DpiwwcHGaxVD0tlkferl1C9epC 3hZacXFqdztg
mbYRMzH7IIWSAeri3xbfbpVeUThgeHkUUgKTO0fmd7a7qivNmezUu0UJpYL5 vWv0CDYXgc11
dZdqr6WimJBY1qHa5iepHOKps+3ZeW9gUkThlmmUCqOmic9t7QE3LINIx/uT oNYyEbQ3wtTs
1HKn+RiLjMa9QDNbw/1hS+3h5V9CJYIfO6etEtJh5NKYWaYdMkZCWZR+UUKj DdjkHsHHnO
+DDzVQ3L8x94n4w3Jzruf8LE3F0CK5M3SCZMCvsnaqIwBho5RIFq7ccUEY0m nhxwyCHptT6O
LZXn9ZbUXgDP56duXh5epJTxUbr+OCSCJZWF1UnnMz8xYvr350e1B1hVgYsl
8NawXn7AJGSY
6cSGMtn9TBBIGjwY0AsJt+zDD4cF8zRICnSleTNWnJXv9EjMNFVDrjHiaqpo 8eXPHUo/IMBp
yAM6i3apDlz8OkPWzSku8397kDiegH53yz3hzWvk3aZkyNLb1U9muEAQ4N9U yBpFF94GB1bS
5d0zG4hODw00PSKdhgalcl3DyKIKG7t2i3OJFX8xAWa1yXR8r5N6u5aVVumt pEnrOMBUk7/o
wayFPy1IODqMv2H/5h/eTW8GtM+XvV9iEz6/GGM6iPqepekImQ/96hG2YOWQ
MyrxbdOU4eCW
EyNFcTQhByaBSUnlXbhvJj4xyJhKw9YrouwIKuRShbKXVTiFi3ioMca00Oo7 a23XVp3z9q2N
fJ+IIP7kULU/LQM5lsjITLX3wKlJ7FzEci1Ni9qXeGUk0RA1+GBhjzsjMwV V68m9hTDeQ77
zglgiW7zC9yS5s/JglghFIRpLpuvje6GxAM5iyu/X9DvNQyIEk9uaqZiNw/4 +n55I7io1/V0
8zp0UYrI/I6W+u4FhPatKEHeDnAOi4g2oiJYzy1jEw6Fwq15nuNDHSRgcHvC Gt19Mwfls1au
DOiDLFgMuoyAbZ1urNFsTbxuJihZtTxae+2BdvwTNDzqCz6DGxTTCCKBWas1 PimopvJW1MsE
sAbpnXUkjTZbVJo5SRIp0GTRWXOtz/jW5MdzBFUGSQqM2ln8+cuqipx2P0Ta H3ohEivmckAE
Fy5yw1DUunksOxjPdVC4g/UfN+4eexIQDhN+PUFUOi3ziYgGWLcmqh63n8Q+q 6tqK8ARlleeK
4HWyBI7rAYMbU9KKjrbbiQILAPGKrNJYhqBuobJK9Q84dpZpleQBjKPv4Lj rBjOL2wRyFxt
oHtYs8/mYDdUUDMlpi4UTPDB0BT03FcT9EwGJhFKOtGA+c2eyGI54NC9SpxS
6oMWhURQufbW
6KZxtgiTuQsPHRyXX4j3zNKnJOj+PdQqvGSBXWqoFVQ8DrWEr5mG8WWyBw9L
FuL+MntuWILJ
VL+WSlg/f74YH0CL85KHXCW3RKGJlWJl5R/TU0wxysIPKO2HEH4pt+9wH3Wt x1B5te7vCUH2
QQ+ZvQ5VK0bqe0QmFHuiGk7EXqnAoS7pCDBmly+YwKue/PB5q0mZpHAIK1z0
Erx8HiaOmDJz
GSTXiZniX+YhsxsWFLMqKGC/48GEGFbnlvmV0WnF8joorAKI5odcwzJZOnzC FdX5BvcRjqVS
WfCxJdth2ZKV3xVcS8kHL8JcZtipCrxcj+X9nNce5n8hKasCY+AqL0n4M419 oUU8SChBGTZj
wkC/VIHOE5DRLhw2NqQUYBUqiGmOurEUaeA22aftRIWT8prQAY5KeEF7xEzM
e6APYHyFYyqy
nlb5HhqoWHTsbCsd9hY9p9Z2nfNk4ILNe3ldWcvfmDTC6Xlk8fG0GtG9YFeB i6zII9QMIPde
aM3qQefcz1E1p0KthrIIPCZKKzX3JrlsDiPKm5FRQt5hiMALY0sSwTzPKz0 08S214xX56rQ
qDII2mwQ94K3WG8gfHvK6ne/WmHltniqr53s3CZuyGquaWHGJIHkxAZ1iNln SZy4Aj9cM6XW
tDMzx++WOPJqV2q/TcP6Kn22jXJNJuxFq3ilwRoj2rxg9Uuro5ufYR9ul/HO OqWkR0RRm1WX
UIm0Oxgs/l6xyjyDKNLGFxSy/hEtKmmMTihXW1x/Gs3fNNABoiUvls1AY9oy UMwKz1y5ztcg
pWvfvGvWzDjBTmmkx4be6flwEwCF9s28FXUm+vbbJ1AdfLXsuMsGo2GLG0lgu
rxFUr23DWEDW
OK+P8Sx1R4+Hw3cOcS1pDsVe1rC0Q7TZGldZGKKIRHxmFzwMbBZzh8rG58ev
7ERPeU1+k+aX
SMYGYdEu3n9Er2TcC74vSnhNIDdQ/h7mUaeNG6M1Ira7/lwm/oRs6+Sfm6ml DCsrQtnbAjo
2zgDcG5xJUvo3KQ+ZMuFyytrTjX+LDhCL9OWlqWf6SjLSyoxrw536zvtK3t dD3tgSWw2YP
iMlza6tLwq2IOgbDTVm1By82F7ajnRHZ7I4h+LxK4UhG2LthN7aX+WRx8ygg8 WjlkGBISKtTp
PcVZ64U5vvTM44xKWikOTpzy8EO4qwQNCpKshAyXhgml2WSBrKXJk/O6XWvl

MGWVHSuv/Zp8

eFalnzSLqQtfgiyfE3O6KR4qcMqly0n7XYGaJEovlwd6g+6nCyK2rrANiC2Z youvLy8smwm6
uwleu18uRbTDjVJzT51mjsfQsrAZn6f+yLiGx6SRBAUVct259RyaLX+6+3aK W3XKha4KZ5Ce
nwqTEfeztZWlvXnfl3FhBjPmq9Spq+EvOikphCOTwVv5hdClRys/fCFdrlY5 r/nh1tuWuEIH
hmzCXn+EWRcldLPZPTeCEN4A2IABE1r2cGkAzq/6k/HjKlKoWSJoqQ9xyPP4 jxtDd+eUGNA8
dMm6GDcdZDVCGx4DULIDHFoKJgZFDxCDLRFQHMKCBi1OD3BY6keIU380lyaJ

oNRUSaCaTkCJ

UqmCk4IquEFMQbg0ZoifDJcfXhjoeAkwb3+yWlzitF9EqFJCo+AaMu/OeRrp qa757yxXqFme
E6slH+4v0FivQibE64SbACZK0jmtVY1W+Fuxqpl56doRtGdQ1SNd8rTgNW2x hS758Uwnc4Er
hUKwTuQm2aMs6t/YQwnKO6iA9Tb2/VKdCdthp7GxLpP7mUdEokyLGg9ZX/fJ fQgakQXPddfE
G0TwSYEQdyWswUxsfjqzuUTJ9tjU5X8OILj/aPQZbpxg93Y0anLs2YXXfGS OeCbWJQxFaM9
jATcg1oD1Pa3vgJpCLJz0uBIDnAiFDKImczR0/IMRnKnrh5emQd41JnnD9qu 5/3YAy/Cf6kN
9a9XmpmSksBop82FF55u8JYISZ3NNxvw4Wao05sCP1mO7HSptEnbG1jjmZV1 hxDcRZdqN7Bz
0truoeYfUnvpmE1PGERpflL/ZAL7HBh1HWN6tMwVNYr/ahv0i4l5Fxl2lfr mtYKGNlZunWt
iN7nDAfvzhSMLB+yyOvqqns196cYldbUCGWg4nbyyq/rdLg6TnKlyzGg8n5R JOTMBUT6iOoV
p1TnrQvVmFQ8LlyoGaYU370m+8PbPPV2gwRLwn6ok7nKYm32qkPemloGqobR

NAp5WthvlGXT

OvfgodO1+I9PY/AtLeEHvcC8UAkX3oEx+5gQz3ptRXuaRumW+9OckID0sa/G MIhICuG1Hx/g
s55xZVfYYG0GWfBcT1LPuT5SaRhLbcdwi1VKQkj0F02dvZDO1OGYZxMbuA5y 10JHsiB0ZNxV
BgztMY49lRk+X8RbOZnnfIKiOzs9qvDoNqge2mHA56TGWvZB7acVr17bEj55 7DGs8lRgy4Pi
PuLDvBW2eRrq4Z1HjkP5xfLj3H5C0tVO76fdUhx1/4MVVbqWKVERpQUg66s 9aKM93k5xeqA
6xSDxgsseJSe7bAykLQ0jmvWuMnyjYMrHyIFTUwo/fPLZ2p7O8yMCgLPB/tL FVrZsCsU++sl
vAmzvlEkwYMUXSjOuDCn5laNDZCbLYyYtxRtmdXl3fHlyYw2FV9o+m2IZW+P kD1XY8iSsgll
kHZOOC9RiUqG+FI7lz4ycKm6pjeZjRVNZ+l4LLZJi4cqzbTmUJw1MgQ5Eder qwQsKaJa/UF0
6ulbx0ssmdPsQGGCbMFG2NHVPhKYX7SR5Bnr6baJs4lXlMnro0fEldN6jW1l 7VZlpC6VRB7q
qtG3tpxAjmmKl8B0BVGzMQ4xAxrkLkqbuWZc/J4D79PMml8M1BHszlboxZqB loGEzAfu0W2k
G6RUH/CEWG82S1IU+o33IA5aJB0gv+IgrXmtiFOdRdsI/BpJIW8V5ifyTZ6l blblcLbx9fnQ
XBY7GoHx1ZDxoupDO3apld9oyZfElgRU3W+JPvR4GCL+o8bB32RcPAiRdnT6

6NgGOWQ/oQLH

bXBsoH7oRkEODjXd1p/fvDpcY7VMQwtsYJNDqdLfcOuTPhGYI2YatETAiW1U AAivhLOEAD53
luh0k3dmuIlBhqngGfLRN7yAFh0XaZVMBCqAM2b/Y8WjgOySY6m3wWwENoqf

U8UMDns/CaWn

U4grKSoDFtRYL3K9Ti2EIGKA63FfaUigtHlqfzp7vj4pjob+GzvKBe2qCtMC xgOPLFhF9K6F
BrPtmo3GLc+ZnW+/iPLoTgGLD+EBFvKW9f/yh/r/Bf6fEDCzAZk4udjbmjz Q/wXvvPDFWVu
ZHN0cmVhbQ0KZW5kb2JqDQp4cmVmDQowIDE2DQowMDAwMDAwMDAwIDY1NTM1

IGYNCjAwMDAw

MDQyODggMDAwMDAgbg0KMDAwMDAwNDA1NCAwMDAwMCBUdQowMDAwMDA0NTIx
IDAwMDAwIG4N

CjAwMDAwMDAwMTcgMDAwMDAgbg0KMDAwMDAwNDIzNyAwMDAwMCBUdQowMDAw
MDA0MTE4IDAw

MDAwIG4NCjAwMDAwMDQxNTggMDAwMDAgbg0KMDAwMDAwNDM4NiAwMDAwMCBU
dQowMDAwMDA0

NDQ4IDAwMDAwIG4NCjAwMDAwMDMzNDAgMDAwMDAgbg0KMDAwMDAwMDE5NSAw
MDAwMCBUdQow

MDAwMDA0NzQ3IDAwMDAwIG4NCjAwMDAwMDQ5NDYgMDAwMDAgbg0KMDAwMDAw
NTg5NyAwMDAw

MCBUdQowMDAwMDA2MzI0IDAwMDAwIG4NCnRyYWlsZXINCjw8DQovU2I6ZSAx
Ng0KL1Jvb3Qg

Subject: Re: Clocking issues - need some help
Posted by [EK Sound](#) on Tue, 05 Dec 2006 00:52:08 GMT
[View Forum Message](#) <> [Reply to Message](#)

RME HDSP9652's in the Nuendo computer, W/C in. The one to the Paris computer was also for a 9652... but it's in my office right now... I have the extra RME card just in case I needed to do a sys-link job with Nuendo.

David.

Neil wrote:

> Dave, it turned out to be the 50-ohm cables that were the problem... but one
> question:

>
> I noticed that your diagram shows a word clock line into the
> Paris COMPUTER and Nuendo COMPUTER in addition to the ones for
> the MEC & RME convertors... how are you word-clocking the
> computer itself?

>
> Neil

>
>
> EK Sound <askme@nospam.com> wrote:

>
>> I am using various WC cable lengths from 12" to 35' (35' for the HD
>> run) here with ZERO problems... but they are all home made 75 Ohm
>> Canare LV-61S with proper crimp ends. Here is a pdf of the current
>> signal flow for the room.

>>
>> David.

>>
>> Neil wrote:

>>
>>> Well, I will try this, but ideally I need the 12-ft cables
>>> regardless, so I'm wondering if the 50-ohm ones (vs. the 75-
>>> ohms that I've seen most WC cables made up of) are what's
>>> causing the problem - or at least COULD be what's causing it.

>>>
>>> Neil

>>>
>>>
>>>
>>

>

Subject: Re: Clocking issues - need some help
Posted by [EK Sound](#) on Tue, 05 Dec 2006 01:17:43 GMT
[View Forum Message](#) <> [Reply to Message](#)

Also the green lines are sometimes more than one cable (HD uses 6 optical lines, Nuendo another 6...)

Neil wrote:

> Oh, OK, I thought meant you had a separate Worldclock card for
> the PC ITSELF (i.e. separate from the convertors).

>

> (Which actually, would not be a bad idea if there WAS such a
> thing - since computers always want to try to default to 44.1,
> even when you disable every onboard audio thingy).

>

> Neil

>

>

>

> EK Sound <askme@nospam.com> wrote:

>

>>RME HDSP9652's in the Nuendo computer, W/C in. The one to the Paris
>>computer was also for a 9652... but it's in my office right now... I
>>have the extra RME card just in case I needed to do a sys-link job
>>with Nuendo.

>>

>>David.

>>

>>Neil wrote:

>>

>>>Dave,it turned out to be the 50-ohm cables that were the problem... but

>

> one

>

>>>question:

>>>

>>>I noticed that your diagram shows a word clock line into the
>>>Paris COMPUTER and Nuendo COMPUTER in addition to the ones for
>>>the MEC & RME convertors... how are you word-clocking the
>>>computer itself?

>>>

>>>Neil

>>>

>>>

>>>EK Sound <askme@nospam.com> wrote:

>>>

>>>

>>>>I am using various WC cable lengths from 12" to 35' (35' for the HD
>>>>run) here with ZERO problems... but they are all home made 75 Ohm
>>>>Canare LV-61S with proper crimp ends. Here is a pdf of the current
>>>>signal flow for the room.

>>>>

>>>>David.

>>>>

>>>>Neil wrote:

>>>>

>>>>

>>>>>Well, I will try this, but ideally I need the 12-ft cables
>>>>>regardless, so I'm wondering if the 50-ohm ones (vs. the 75-
>>>>>ohms that I've seen most WC cables made up of) are what's
>>>>>causing the problem - or at least COULD be what's causing it.

>>>>>

>>>>>Neil

>>>>>

>>>>>

>>>>>

>>>>>

>

Subject: Re: Clocking issues - need some help
Posted by Nil on Tue, 05 Dec 2006 01:32:07 GMT

[View Forum Message](#) <> [Reply to Message](#)

Dave,it turned out to be the 50-ohm cables that were the problem... but one question:

I noticed that your diagram shows a word clock line into the Paris COMPUTER and Nuendo COMPUTER in addition to the ones for the MEC & RME convertors... how are you word-clocking the computer itself?

Neil

EK Sound <askme@nospam.com> wrote:

>

>I am using various WC cable lengths from 12" to 35' (35' for the HD
>run) here with ZERO problems... but they are all home made 75 Ohm
>Canare LV-61S with proper crimp ends. Here is a pdf of the current
>signal flow for the room.

>

>David.
>
>Neil wrote:
>> Well, I will try this, but ideally I need the 12-ft cables
>> regardless, so I'm wondering if the 50-ohm ones (vs. the 75-
>> ohms that I've seen most WC cables made up of) are what's
>> causing the problem - or at least COULD be what's causing it.
>>
>> Neil
>>
>>
>>
>

Subject: Re: Clocking issues - need some help
Posted by [Nil](#) on Tue, 05 Dec 2006 01:51:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

Oh, OK, I thought meant you had a separate Worldclock card for the PC ITSELF (i.e. separate from the convertors).

(Which actually, would not be a bad idea if there WAS such a thing - since computers always want to try to default to 44.1, even when you disable every onboard audio thingy).

Neil

EK Sound <askme@nospam.com> wrote:

>RME HDSP9652's in the Nuendo computer, W/C in. The one to the Paris
>computer was also for a 9652... but it's in my office right now... I
>have the extra RME card just in case I needed to do a sys-link job
>with Nuendo.

>

>David.

>

>Neil wrote:

>> Dave, it turned out to be the 50-ohm cables that were the problem... but one

>> question:

>>

>> I noticed that your diagram shows a word clock line into the
>> Paris COMPUTER and Nuendo COMPUTER in addition to the ones for
>> the MEC & RME convertors... how are you word-clocking the
>> computer itself?

>>

>> Neil
>>
>>
>> EK Sound <askme@nospam.com> wrote:
>>
>>>I am using various WC cable lengths from 12" to 35' (35' for the HD
>>>run) here with ZERO problems... but they are all home made 75 Ohm
>>>Canare LV-61S with proper crimp ends. Here is a pdf of the current
>>>signal flow for the room.
>>>
>>>David.
>>>
>>>Neil wrote:
>>>
>>>>Well, I will try this, but ideally I need the 12-ft cables
>>>>regardless, so I'm wondering if the 50-ohm ones (vs. the 75-
>>>>ohms that I've seen most WC cables made up of) are what's
>>>>causing the problem - or at least COULD be what's causing it.
>>>>
>>>>Neil
>>>>
>>>>
>>>>
>>>>
>>>
>>

Subject: Re: Clocking issues - need some help
Posted by [DJ](#) on Tue, 05 Dec 2006 01:56:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm glad someone else here is as crazy as I am.

;o)

"EK Sound" <askme@nospam.com> wrote in message news:4574c643\$1@linux...
> Also the green lines are sometimes more than one cable (HD uses 6 optical
> lines, Nuendo another 6...)
>
> Neil wrote:
>
>> Oh, OK, I thought meant you had a separate Worldclock card for
>> the PC ITSELF (i.e. separate from the convertors).
>>
>> (Which actually, would not be a bad idea if there WAS such a
>> thing - since computers always want to try to default to 44.1,
>> even when you disable every onboard audio thingy).
>>

>> Neil
>>
>>
>>
>> EK Sound <askme@nospam.com> wrote:
>>
>>>RME HDSP9652's in the Nuendo computer, W/C in. The one to the Paris
>>>computer was also for a 9652... but it's in my office right now... I have
>>>the extra RME card just in case I needed to do a sys-link job with
>>>Nuendo.
>>>
>>>David.
>>>
>>>Neil wrote:
>>>
>>>>Dave,it turned out to be the 50-ohm cables that were the problem... but
>>
>> one
>>
>>>>question:
>>>>
>>>>I noticed that your diagram shows a word clock line into the
>>>>Paris COMPUTER and Nuendo COMPUTER in addition to the ones for
>>>>the MEC & RME convertors... how are you word-clocking the
>>>>computer itself?
>>>>
>>>>Neil
>>>>
>>>>
>>>>EK Sound <askme@nospam.com> wrote:
>>>>
>>>>
>>>>>I am using various WC cable lengths from 12" to 35' (35' for the HD
>>>>>run) here with ZERO problems... but they are all home made 75 Ohm
>>>>>Canare LV-61S with proper crimp ends. Here is a pdf of the current
>>>>>signal flow for the room.
>>>>>
>>>>>David.
>>>>>
>>>>>Neil wrote:
>>>>>
>>>>>
>>>>>>Well, I will try this, but ideally I need the 12-ft cables
>>>>>>regardless, so I'm wondering if the 50-ohm ones (vs. the 75-
>>>>>>ohms that I've seen most WC cables made up of) are what's
>>>>>>causing the problem - or at least COULD be what's causing it.
>>>>>>
>>>>>>Neil

>>>>>
>>>>>
>>>>>
>>>>
>>
