OBS构建项目

Abstract

在OBS中，项目可以作为构建依赖或是构建目标
（构建依赖：构建目标需要的rpm包来源
构建目标：待构建的软件包的系统架构及版本）。

构建依赖的项目可以是本地项目或远程项目（DoD）。

以本文为例，以openEuler:23.09作为基础项目，构建openEuler:24.03

大致步骤：
1、配置了一个DoD（远程依赖）的openEuler23.09项目
2、配置了一个openEuler24.03的项目。
3、将openEuler23.09作为openEuler24.03的依赖，24.03会继承23.09的Project Configuration，引用23.09的后台:full目录的rpm包。

最后基本成功构建了24.03，成功了1030个包。之后的想要构建24.03包时，可以直接将24.03项目作为他的构建目标。

涉及到的OBS使用部分参考打包教程。

1、 项目的基础配置介绍

项目主要关心的部分是**Project Configuration**和**Meta**两部分。

Project Configuration类似于SPEC文件，可以对整个项目所有的包进行控制。

Meta里面则是一些元数据：基本信息，构建控制。

2、 openEuler:23.09

Project Configuration部分:

Project Configuration内容的语法

Preinstall:预安装，在构建开始时安装到chroot的包

Prefer:优先，当几个包都提供某个依赖时，在构建时优先使用这个包

Prefer: -A 全局不选 A，除非没其他选项

Prefer: my-web-server:nodejs

只有在my-web-server的情况才选择nodejs
例子:
假如有两个包:都提供 js-engine:

```
quickjs
nodejs
```

同时，两个待构建的包分别依赖这个 js-engine:

```
my-web-server
my-iot-agent
```

如想实现:

```
my-web-server 使用 nodejs
my-iot-agent 使用 quickjs
```

设置应为则:

```
Prefer: my-web-server:nodejs
Prefer: my-iot-agent:quickjs
```

其他的配置项可以参考OBS构建配置官方文档

Project Configuration内容

```
Substitute: python-devel


Preinstall: iproute dhcp libatomic_ops
################################## 针对 RISC-V 的一些特殊/临时配置 BEGIN ##########
# 为使docker、qemu虚拟构建机工作，增加以下配置，不影响sg2042构建机
VMInstall: util-linux libmount ncurses-libs coreutils libblkid libuuid libsmartco
VMInstall: libxcrypt perl perl-libs perl-Digest-MD5 perl-Exporter perl-Carp
# jose、lsof、vdo 等还需要这几个
VMInstall: perl-File-Temp perl-PathTools perl-constant perl-File-Path perl-Scalar
# 2203以来一直是忽略boost对这两个包的require
Substitute: libquadmath-devel
Substitute: libquadmath-static
# valgrind 当前还无法合入OE
Substitute: valgrind
Substitute: valgrind-devel

%if 1
### Fri, 08 Sep 2023 copy from openEuler:23.09:selfbuild:BaseOS

Prefer: libseccomp python2-pip wqy-zenhei-fonts openssl-devel gobject-introspecti
Conflict: nss-softokn nss-softokn-freebl

Prefer: openEuler-rpm-config
Prefer: openEuler-release
Prefer: openEuler-logos euleros-logos
Prefer: openEuler-repos
Prefer: openEuler-indexhtml
Prefer: protobuf-java protobuf-devel
#custom prefer for openEuler
Prefer: autogen texinfo glx-utils
Prefer: jbig2dec java-1.8.0-openjdk-devel
Prefer: mesa-devel fontpackages-filesystem
#end
# 解决postgresql和libpq冲突，两个包同时提供libpq.so.5(64bit)
Prefer: postgresql-lib
Prefer: java-1.7.0-openjdk-javadoc lxpolkit rubygem-minitest python3-capstone pyt
Prefer: sblim-sfcb crda clamav-data java-1.8.0-openjdk-javadoc pkcs11-helper-deve
Prefer: Lmod
Prefer: lua
Prefer: selinux-policy-mls perl-Archive-Extract-Z-Compress-Zlib perl-Archive-Extr
```

```
Prefer: binutils-devel python2-fabric perl-Archive-Extract-gz-Compress-Zlib perl-A
Prefer: perl-Archive-Extract-lzma-IO-Uncompress-UnLzma perl-Archive-Extract-tar-A
Prefer: perl-Archive-Extract-tbz-Archive-Tar-IO-Uncompress-Bunzip2 perl-Archive-E
Prefer: postfix
Prefer: selinux-policy-mls
Prefer: libverto-tevent java-1.7.0-openjdk-devel kernel-devel
Prefer: postfix selinux-policy-minimum
Prefer: atlas-sse3
Prefer: python-setuptools
Prefer: elinks
Prefer: libverto-libev
Prefer: lua
Prefer: kernel
Prefer: rubygem-rspec
Prefer: emacs
Prefer: perl-Archive-Extract-tgz-Archive-Tar-Compress-Zlib
Prefer: php-symfony3-options-resolver
Prefer: golang-gopkg-check-devel
Prefer: kernel-devel
Prefer: rust-serde_derive-devel
Prefer: openni-devel
Prefer: perl-Archive-Extract-tgz-Archive-Tar-Compress-Zlib perl-Archive-Extract-Z
Prefer: perl-Archive-Extract-gz-Compress-Zlib rubygem-minitest rubygem-rspec gnup
Prefer: perl-Archive-Extract-lzma-IO-Uncompress-UnLzma perl-Archive-Extract-tar-A
Prefer: perl-Archive-Extract-txz-Archive-Tar-IO-Uncompress-UnXz perl-Archive-Extr
Prefer: gnome-themes-standard
Prefer: jbigkit-libs
Prefer: libcdio-paranoia libcdio
Prefer: java-1.8.0-openjdk glassfish-el-api glassfish-servlet-api
# 2022 02 16
Prefer: jakarta-el jakarta-server-pages-api

#2021 09 10#
Prefer: compat-openssl11-libs

#2022 03 22#
Prefer: jakarta-server-pages ocaml-camlp4 tinyxml2 ocaml-ocamlbuild ocaml-csexp

#2022 06 06
Prefer: jakarta-mail

#2023 01 19
Prefer: texlive-latex
```

```
Substitute: /usr/bin/protoc protobuf
Substitute: %{_bindir}/pathfix.py python3-devel
Substitute: %{_bindir}/sgml2xml opensp
Substitute: %{_bindir}/nsgmls opensp
Substitute: %{_bindir}/ps procps-ng

Substitute: %{_bindir}/sgml2xml opensp
Substitute: python-dbus python2-dbus
Substitute: /usr/sbin/useradd shadow
Substitute: /usr/sbin/groupadd shadow
Substitute: /usr/sbin/userdel shadow
Substitute: /usr/sbin/groupdel shadow
Substitute: /usr/bin/pod2man perl-podlators
Substitute: %{_bindir}/dtrace systemtap
Substitute: %{_bindir}/cmake cmake
Substitute: %{_bindir}/dtrace systemtap-sdt-devel
Substitute: %{_bindir}/cmake cmake
Substitute: %{_bindir}/checksec checksec
Substitute: %{_bindir}/sphinx-build python2-sphinx
Substitute:  /usr/sbin/sendmail sendmail
Substitute:  /usr/bin/pod2man perl-podlators
Substitute:  /usr/bin/pdflatex texlive-latex-bin-bin
Substitute:  /usr/bin/makeindex texlive-makeindex-bin
Substitute: /lib/libc.so.6 glibc
Substitute: /usr/lib/libc.so glibc
Substitute: /lib64/libc.so.6 glibc
Substitute: /usr/lib64/libc.so glibc
Substitute: /usr/bin/xsltproc libxslt
Substitute: /etc/init.d chkconfig
Substitute: %{_includedir}/linux/if.h kernel-headers
Substitute: /usr/bin/yelp-build yelp-tools
Substitute: /usr/bin/ducktype python3-mallard-ducktype
Substitute: /usr/bin/chrpath chrpath
Substitute: /usr/bin/tclsh tcl
Substitute: /usr/bin/file file
Substitute: /usr/bin/base64 coreutils
Substitute: /usr/bin/head coreutils
Substitute: /usr/bin/sha256sum coreutils
Substitute: /usr/bin/tr coreutils
Substitute: /usr/bin/jq jq
Substitute: %{_bindir}/pkg-config pkgconf-pkg-config
Substitute: /usr/bin/gtk-update-icon-cache gtk-update-icon-cache
```

```
Substitute: /usr/bin/c++ c++
Substitute: %{_bindir}/sphinx-build-3 python3-sphinx
Substitute: /usr/bin/awk gawk
Substitute: /usr/bin/pathfix.py python3-devel
Substitute: /usr/bin/doxygen doxygen
Substitute: /usr/bin/execstack execstack
Substitute: /usr/bin/g-ir-scanner gobject-introspection-devel
Substitute: %{_bindir}/phpab php-theseer-autoload
Substitute: %{_bindir}/phpunit php-phpunit-PHPUnit

Substitute: %{_bindir}/rst2html python3-docutils
Substitute: %{_bindir}/sphinx-build-2 python2-sphinx
Substitute: %{_bindir}/valac vala

Substitute: /usr/bin/pygmentize python3-pygments
Substitute: /usr/bin/perl perl
Substitute: /usr/bin/iconv glibc-common
Substitute: %{_bindir}/hostname hostname
Substitute: %{_bindir}/a2x asciidoc
Substitute: /usr/bin/certtool gnutls-utils
Substitute: /usr/bin/socat socat
Substitute: /usr/sbin/ss iproute
Substitute: /usr/bin/cmp diffutils
Substitute: /usr/bin/rename util-linux
Substitute: /usr/sbin/sysctl procps-ng
Substitute: %{_bindir}/libgcrypt-config libgcrypt-devel
Substitute: /usr/bin/man man-db
Substitute: /usr/bin/dtrace systemtap-sdt-devel
Substitute: /usr/sbin/ifconfig net-tools
Substitute: %{_bindir}/sphinx-build python2-sphinx
Substitute: /usr/include/gnu/stubs-32.h glibc32
Substitute: /usr/bin/dbus-launch dbus-x11
Substitute: /usr/bin/2to3 python3-devel
Substitute: %{_bindir}/xsltproc libxslt
Substitute: %{_bindir}/sed sed
Substitute: %{_bindir}/sphinx-build-2 python2-sphinx
Substitute: %{_bindir}/sphinx-build-3 python3-sphinx
Substitute: python%{python3_pkgversion}-devel python3-devel
Substitute: python%{python3_pkgversion}-setuptools python3-setuptools
Substitute: python%{python3_pkgversion}-chardet python3-chardet
Substitute: python%{python3_pkgversion}-urllib3 python3-urllib3
Substitute: python%{python3_pkgversion}-idna python3-idna
Substitute: python%{python3_pkgversion}-pytest python3-pytest
```

```
Substitute: python%{python3_pkgversion}-pytest-cov python3-pytest-cov
Substitute: python%{python3_pkgversion}-pytest-httpbin python3-pytest-httpbin
Substitute: python%{python3_pkgversion}-pytest-mock python3-pytest-mock
Substitute: python%{python3_pkgversion}-pip python3-pip
Substitute: python%{python3_pkgversion}-wheel python3-wheel
Substitute: /usr/bin/dnf dnf
Substitute: /usr/bin/zip zip
Substitute: pkgconfig(libsystemd-journal) systemd-devel
Substitute: %{_prefix}/share/i18n/locales/de_DE glibc-locale-source
Substitute: /usr/bin/ssh-add openssh-clients
Substitute: /usr/bin/ssh-agent openssh-clients
Substitute: /usr/bin/ssh openssh-clients
Substitute:  /usr/bin/appstream-util libappstream-glib
Substitute: /usr/bin/xmlto xmlto
Substitute: /etc/init.d chkconfig
Substitute: %{_includedir}/linux/if.h kernel-headers
Substitute: /usr/bin/dbus-launch dbus-x11
Substitute: /lib/libc.so.6 glibc32
Substitute: /usr/lib/libc.so glibc32
Substitute: /lib64/libc.so.6 glibc
Substitute: /usr/lib64/libc.so glibc
Substitute: /usr/bin/qemu-img  qemu
Substitute: /usr/bin/pod2man perl-podlators
Substitute:  /usr/bin/appstream-util libappstream-glib
Substitute:  /usr/bin/xmlto xmlto
Substitute: /usr/bin/pod2html perl
Substitute: /usr/sbin/mke2fs e2fsprogs
Substitute: %{_libdir}/krb5/plugins/kdb/db2.so krb5-libs
Substitute: /usr/bin/gtk-encode-symbolic-svg gtk3-devel
Substitute: /usr/bin/dos2unix dos2unix
Substitute: /usr/bin/unix2dos dos2unix
Substitute: /usr/bin/which which
Substitute: /usr/bin/epstopdf texlive-epstopdf
Substitute: /usr/bin/desktop-file-validate desktop-file-utils
#Substitute: pkgconfig(libavcodec) ffmpeg-devel
Substitute: /usr/bin/valac vala
Substitute: %{_bindir}/xsltproc libxslt
Substitute: %{_bindir}/desktop-file-validate desktop-file-utils
Substitute: %{_bindir}/appstream-util libappstream-glib
Substitute: /usr/bin/ssh-agent openssh-clients
Substitute: /usr/bin/ssh-add openssh-clients
Substitute: /usr/bin/2to3 python3-devel
Substitute: /usr/bin/texi2dvi texinfo-tex
```

```
Substitute: /usr/bin/ssh openssh-clients
Substitute: %{_bindir}/pod2html perl-podlators
Substitute: %{_bindir}/pod2man  perl-podlators
Substitute: /usr/bin/pod2text perl-podlators
Substitute: /usr/bin/ping iputils
Substitute: /usr/bin/wget wget
Substitute: /usr/bin/qemu-img qemu-img
Substitute: /usr/bin/kreadconfig5 kf5-kconfig-core
Substitute: /usr/bin/xmllint libxml2
Substitute: /usr/bin/nc nmap-ncat
Substitute: /usr/bin/lsof lsof
Substitute: /usr/bin/ps procps-ng
Substitute: %{__perl} perl
Substitute: /usr/bin/rpcgen rpcgen
Substitute: %{_bindir}/latex texlive-latex
Substitute: /usr/bin/sphinx-build python2-sphinx
Substitute: %{_bindir}/sphinx-build python2-sphinx
Substitute: %{_bindir}/memcached memcached
Substitute: /usr/bin/tox python3-tox
Substitute: %{_bindir}/2to3 python3-devel
Substitute: %{_bindir}/mongod mongodb-server
Substitute: %{_bindir}/redis-server redis
Substitute: %{_bindir}/pkill procps-ng
Substitute: %{_bindir}/netstat net-tools
Substitute: %{_bindir}/gpg gnupg
Substitute: %{__make} make
Substitute: %{_datadir}/a2ps/afm/phvr.afm a2ps
Substitute: %{_bindir}/podselect perl-Pod-Parser
Substitute: /usr/bin/autopoint gettext-devel
Substitute: %{_bindir}/perl perl
Substitute: %{_bindir}/openssl openssl
Substitute: %{_bindir}/man man-db
Substitute: /usr/bin/zip zip
Substitute: /usr/bin/c++ gcc
Substitute: /usr/bin/makeinfo texinfo
Substitute: %{_includedir}/magic.h file-devel
Substitute: python2dist(markdown) python2-markdown
Substitute: %{_bindir}/python python-unversioned-command
Substitute: %{_includedir}/gnu/stubs-32.h glibc32
Substitute:  /usr/bin/dnf dnf
Substitute: /usr/bin/getopt util-linux
Substitute: mysql-devel mariadb-connector-c-devel
Substitute: gnupg gnupg2
```

```
Substitute: audiofile{?_isa} audiofile
Substitute: /etc/pki/tls/certs/ca-bundle.crt ca-certificates



Prefer: perl-libs fonts-filesystem apr libnghttp2 dnf dnf-plugins-core mozjs60 gs
Prefer: nodejs-nan0 uglify-js boost-devel

Prefer: ccid libglvnd-devel device-mapper-persistent-data dbus-libs rpm-libs
Prefer: libffi7 libffi6 ima-evm-utils
Prefer: maven pipewire
Prefer: jetty-http jetty-io jetty-security jetty-server jetty-servlet jetty-util

Substitute: librpm.so.8()(64bit) rpm-libs
Substitute: "python(abi) = 3.7" "python(abi) = 3.8"
%endif

%if 0
### Fri, 08 Sep 2023 copy from openEuler:23.09:selfbuild:BaseOS

Macros:
# Add for glibc by xiasenlin, 2022/02/23, related issue:https://gitee.com/src-oper
%glibc_abort_after_test_fail 1
:Macros

Preinstall: glibc bash rpm rpm-libs
Preinstall: libcap libacl libdb bzip2 zlib xz-libs zstd lua popt openssl-libs att
#Preinstall: libcap libacl libdb bzip2 zlib xz-libs zstd lua popt compat-openssl1
Preinstall: libselinux pcre2 dbus-libs systemd-libs lz4 libgcrypt libgpg-error
Preinstall: filesystem
Preinstall: digest-list-tools selinux-policy-targeted pesign-obs-integration
Preinstall: cmake
# add for rust, 20230920
Preinstall: libatomic
# add digest-list-tools selinux-policy-targeted by senlin for :https://gitee.com/
# add pesign-obs-integration by senlin for: https://e.gitee.com/open_euler/issues



Support: chkconfig
Support: util-linux
Support: rpm-build
Support: make
#Support: custom_build_tool-nocheck
```

```
Order: filesystem:glibc
Order: filesystem:bash
Order: ncurses-libs:filesystem
Order: coreutils:openssl-libs
Order: audit:systemd
Order: cryptsetup:unbound-libs
Order: cryptsetup:openssh-server

Support: gcc_secure

#BuildFlags: logidlelimit:1800

Macros:
%source_date_epoch_from_changelog Y
%clamp_mtime_to_source_date_epoch Y
%use_source_date_epoch_as_buildtime Y
:Macros

Order: filesystem:glibc
Order: filesystem:vim-filesystem
Order: filesystem:emacs-filesystem
Order: filesystem:acl
Order: filesystem:attr
Order: filesystem:libgcc
Order: filesystem:setup
Order: filesystem:bash

FileProvides: /usr/bin/fipscheck  fipscheck
FileProvides: /usr/bin/db_stat    libdb-utils
FileProvides: /usr/bin/gdb-add-index gdb
FileProvides: /usr/bin/gpg2 gnupg2
FileProvides: /usr/bin/ruby       ruby
FileProvides: /usr/bin/python python2
FileProvides: /usr/bin/python2 python2
FileProvides: /usr/bin/python3 python3
FileProvides: /usr/bin/dtrace systemtap-sdt-devel
FileProvides: /usr/sbin/ifconfig net-tools
FileProvides: /usr/bin/execstack execstack
%endif
```

```
%if 1
### Fri, 08 Sep 2023 copy from openEuler:23.09:selfbuild:BaseOS
Macros:
%nocheck_exclude qt5-qtbase
%__brp_digest_list /usr/lib/rpm/brp-digest-list %{buildroot}
%nodejs_arches aarch64 x86_64 riscv64
:Macros

Release: %{?release}

Macros:
%openeuler 1
%openEuler 1
%_specdir %{_topdir}/SOURCES
%openblas_arches  aarch64  x86_64 riscv64

%_vendor openEuler
%_isa %{?__isa:(%{__isa})}%{!?__isa:%{nil}}
%vendor http://openeuler.org
%distribution Huawei openEuler
%packager http://openeuler.org

#for sign
%_signature gpg
%_gpg_path /home/abuild/.gnupg
%_gpg_name private OBS
%__gpg_sign_cmd         %{__gpg} \
    gpg --no-verbose --no-armor \
    %{?_gpg_digest_algo:--digest-algo %{_gpg_digest_algo}} \
    --batch --pinentry-mode=loopback --passphrase="" \
    --no-secmem-warning \
    %{?_gpg_sign_cmd_extra_args:%{_gpg_sign_cmd_extra_args}} \
    -u "%{_gpg_name}" -sbo %{__signature_filename} %{__plaintext_filename}

%kernel_module_package_buildreqs kernel-devel openEuler-rpm-config

%with_python3 1
%with_python2 1
%python3_pkgversion 3
#%__os_install_post %{nil}
```

```
%python3_pkgversion 3
%golang_arches %{ix86} x86_64 %{arm} aarch64 ppc64le s390x riscv64
%efi_arch aa64
%efi_vendor openEuler
%efi aarch64 x86_64 riscv64
%unsignedaa64 shim-unsigned-aarch64
%unsignedx64 shim-unsigned-x64
%unsignedia32 shim-unsigned-ia32
%shimveraa64 15
%shimverx64 15
%shimveria32 15
%valgrind_arches %{ix86} x86_64 %{arm} aarch64 ppc64le s390x
%mono_arches %{ix86} x86_64 %{arm} aarch64 ppc64le s390x
%openblas_arches %{ix86} x86_64 %{arm} aarch64 ppc64le s390x riscv64
%ocaml_native_compiler   %{ix86} x86_64 %{arm} aarch64 ppc64le s390x riscv64
%ocaml_natdynlink        %{ix86} x86_64 %{arm} aarch64 ppc64le s390x riscv64
%ocaml_native_profiling  %{ix86} x86_64 %{arm} aarch64 ppc64le s390x riscv64
%with_ocaml 1
%dist .oe2309

%ext_info .gz
%ext_man .gz
#%_unpackaged_files_terminate_build 0

%info_add(:-:) test -x /sbin/install-info -a -f %{?2}%{?!2:%{_infodir}}/%{1}%ext_
%{nil}

%info_del(:-:) test -x /sbin/install-info -a ! -f %{?2}%{?!2:%{_infodir}}/%{1}%ex
%{nil}

# 2022-02-17 add automake
%gcc_secure_exclude "gcc-for-openEuler.spec|podman.spec|gcc.spec|arm-trusted-firm

%_build_id_links none

#custom macros
%openEuler 1
%disable_rpath \
sed -i 's|^hardcode_libdir_flag_spec=.*|hardcode_libdir_flag_spec=""|g' libtool \
sed -i 's|^runpath_var=LD_RUN_PATH|runpath_var=DIE_RPATH_DIE|g' libtool

%delete_la_and_a \
find $RPM_BUILD_ROOT -type f -name "*.la" -delete \
```

```
find $RPM_BUILD_ROOT -type f -name "*.a" -delete

%delete_la  find $RPM_BUILD_ROOT -type f -name "*.la" -delete

%chrpath_delete find $RPM_BUILD_ROOT/ -type f -exec file {} ';' | grep "\<ELF\>"

%package_help        \
%package        help \
Summary:        Documents for %{name} \
Buildarch:      noarch \
Requires:               man info \
\
%description help \
Man pages and other related documents for %{name}.

#%sbin_installinfo_rm bc.info
#%sbin_installinfo_rm bc.info.gz

%install_info() \
/sbin/install-info %1 %{_infodir}/dir || :

%install_info_rm() \
/sbin/install-info --remove %1 %{_infodir}/dir || :
:Macros
%endif

%if 1
Macros:
%_texmf          /usr/share/texlive/texmf-local
%_texmf_main     /usr/share/texlive/texmf-dist
%_texmf_vendor   /usr/share/texlive/texmf-dist
%_texmf_var      /var/lib/texmf
%_texmf_conf     /usr/share/texlive/texmf-config

%texlive_post \
mkdir -p /var/run/texlive \
touch /var/run/texlive/run-texhash \
touch /var/run/texlive/run-mtxrun \
:

%texlive_postun \
if [ $1 == 1 ]; then \
mkdir -p /var/run/texlive \
```

```
touch /var/run/run-texhash \
else \
%{_bindir}/texhash 2> /dev/null \
fi \
:

%texlive_posttrans \
if [ -e /var/run/texlive/run-texhash ] && [ -e %{_bindir}/texhash ]; then %{_bind
if [ -e /var/run/texlive/run-mtxrun ]; then export TEXMF=/usr/share/texlive/texmf
:

:Macros
%endif


%if 1
Preinstall: glibc bash rpm rpm-libs
Preinstall: libcap libacl libdb bzip2 zlib xz-libs zstd lua popt openssl-libs att
#Preinstall: libcap libacl libdb bzip2 zlib xz-libs zstd lua popt compat-openssl1
Preinstall: libselinux pcre2 dbus-libs systemd-libs lz4 libgcrypt libgpg-error
Preinstall: filesystem
Preinstall: digest-list-tools selinux-policy-targeted pesign-obs-integration
# add digest-list-tools selinux-policy-targeted by senlin for :https://gitee.com/
# add pesign-obs-integration by senlin for: https://e.gitee.com/open_euler/issues


Support: chkconfig
Support: util-linux
Support: rpm-build
Support: make
#Support: custom_build_tool-nocheck

Order: filesystem:glibc
Order: filesystem:bash
Order: ncurses-libs:filesystem
Order: coreutils:openssl-libs
Order: audit:systemd
Order: cryptsetup:unbound-libs
Order: cryptsetup:openssh-server

Support: gcc_secure

BuildFlags: logidlelimit:1800
```

```
Macros:
%source_date_epoch_from_changelog Y
%clamp_mtime_to_source_date_epoch Y
%use_source_date_epoch_as_buildtime Y
:Macros

Order: filesystem:glibc
Order: filesystem:vim-filesystem
Order: filesystem:emacs-filesystem
Order: filesystem:acl
Order: filesystem:attr
Order: filesystem:libgcc
Order: filesystem:setup
Order: filesystem:bash

FileProvides: /usr/bin/fipscheck  fipscheck
FileProvides: /usr/bin/db_stat    libdb-utils
FileProvides: /usr/bin/gdb-add-index gdb
FileProvides: /usr/bin/gpg2 gnupg2
FileProvides: /usr/bin/ruby       ruby
FileProvides: /usr/bin/python python2
FileProvides: /usr/bin/python2 python2
FileProvides: /usr/bin/python3 python3
FileProvides: /usr/bin/dtrace systemtap-sdt-devel
FileProvides: /usr/sbin/ifconfig net-tools
FileProvides: /usr/bin/execstack execstack

Prefer: libseccomp python2-pip wqy-zenhei-fonts openssl-devel gobject-introspecti
Conflict: nss-softokn nss-softokn-freebl

Prefer: openEuler-rpm-config
Prefer: openEuler-release
Prefer: openEuler-logos euleros-logos
Prefer: openEuler-repos
Prefer: openEuler-indexhtml
Prefer: protobuf-java protobuf-devel
#custom prefer for openEuler
Prefer: autogen texinfo glx-utils
Prefer: jbig2dec java-1.8.0-openjdk-devel
Prefer: mesa-devel fontpackages-filesystem
#end
# 解决postgresql和libpq冲突，两个包同时提供libpq.so.5(64bit)
```

```
Prefer: postgresql-lib
Prefer: java-1.7.0-openjdk-javadoc lxpolkit rubygem-minitest python3-capstone pyt
Prefer: sblim-sfcb crda clamav-data java-1.8.0-openjdk-javadoc pkcs11-helper-deve
Prefer: Lmod
Prefer: lua
Prefer: selinux-policy-mls perl-Archive-Extract-Z-Compress-Zlib perl-Archive-Extr
Prefer: binutils-devel python2-fabric perl-Archive-Extract-gz-Compress-Zlib perl-A
Prefer: perl-Archive-Extract-lzma-IO-Uncompress-UnLzma perl-Archive-Extract-tar-A
Prefer: perl-Archive-Extract-tbz-Archive-Tar-IO-Uncompress-Bunzip2 perl-Archive-E
Prefer: postfix
Prefer: selinux-policy-mls
Prefer: libverto-tevent java-1.7.0-openjdk-devel kernel-devel
Prefer: postfix selinux-policy-minimum
Prefer: atlas-sse3
Prefer: python-setuptools
Prefer: elinks
Prefer: libverto-libev
Prefer: lua
Prefer: kernel
Prefer: rubygem-rspec
Prefer: emacs
Prefer: perl-Archive-Extract-tgz-Archive-Tar-Compress-Zlib
Prefer: php-symfony3-options-resolver
Prefer: golang-gopkg-check-devel
Prefer: kernel-devel
Prefer: rust-serde_derive-devel
Prefer: openni-devel
Prefer: perl-Archive-Extract-tgz-Archive-Tar-Compress-Zlib perl-Archive-Extract-Z
Prefer: perl-Archive-Extract-gz-Compress-Zlib rubygem-minitest rubygem-rspec gnup
Prefer: perl-Archive-Extract-lzma-IO-Uncompress-UnLzma perl-Archive-Extract-tar-A
Prefer: perl-Archive-Extract-txz-Archive-Tar-IO-Uncompress-UnXz perl-Archive-Extr
Prefer: gnome-themes-standard
Prefer: jbigkit-libs
Prefer: libcdio-paranoia libcdio
Prefer: java-1.8.0-openjdk glassfish-el-api glassfish-servlet-api
# 2022 02 16
Prefer: jakarta-el jakarta-server-pages-api

#2021 09 10#
Prefer: compat-openssl11-libs

#2022 03 22#
Prefer: jakarta-server-pages ocaml-camlp4 tinyxml2 ocaml-ocamlbuild ocaml-csexp
```

```
#2022 06 06
Prefer: jakarta-mail

#2023 01 19
Prefer: texlive-latex

Substitute: /usr/bin/protoc protobuf
Substitute: %{_bindir}/pathfix.py python3-devel
Substitute: %{_bindir}/sgml2xml opensp
Substitute: %{_bindir}/nsgmls opensp
Substitute: %{_bindir}/ps procps-ng

Substitute: %{_bindir}/sgml2xml opensp
Substitute: python-dbus python2-dbus
Substitute: /usr/sbin/useradd shadow
Substitute: /usr/sbin/groupadd shadow
Substitute: /usr/sbin/userdel shadow
Substitute: /usr/sbin/groupdel shadow
Substitute: /usr/bin/pod2man perl-podlators
Substitute: %{_bindir}/dtrace systemtap
Substitute: %{_bindir}/cmake cmake
Substitute: %{_bindir}/dtrace systemtap-sdt-devel
Substitute: %{_bindir}/cmake cmake
Substitute: %{_bindir}/checksec checksec
Substitute: %{_bindir}/sphinx-build python2-sphinx
Substitute:  /usr/sbin/sendmail sendmail
Substitute:  /usr/bin/pod2man perl-podlators
Substitute:  /usr/bin/pdflatex texlive-latex-bin-bin
Substitute:  /usr/bin/makeindex texlive-makeindex-bin
Substitute: /lib/libc.so.6 glibc
Substitute: /usr/lib/libc.so glibc
Substitute: /lib64/libc.so.6 glibc
Substitute: /usr/lib64/libc.so glibc
Substitute: /usr/bin/xsltproc libxslt
Substitute: /etc/init.d chkconfig
Substitute: %{_includedir}/linux/if.h kernel-headers
Substitute: /usr/bin/yelp-build yelp-tools
Substitute: /usr/bin/ducktype python3-mallard-ducktype
Substitute: /usr/bin/chrpath chrpath
Substitute: /usr/bin/tclsh tcl
Substitute: /usr/bin/file file
Substitute: /usr/bin/base64 coreutils
```

```
Substitute: /usr/bin/head coreutils
Substitute: /usr/bin/sha256sum coreutils
Substitute: /usr/bin/tr coreutils
Substitute: /usr/bin/jq jq
Substitute: %{_bindir}/pkg-config pkgconf-pkg-config
Substitute: /usr/bin/gtk-update-icon-cache gtk-update-icon-cache
Substitute: /usr/bin/c++ c++
Substitute: %{_bindir}/sphinx-build-3 python3-sphinx
Substitute: /usr/bin/awk gawk
Substitute: /usr/bin/pathfix.py python3-devel
Substitute: /usr/bin/doxygen doxygen
Substitute: /usr/bin/execstack execstack
Substitute: /usr/bin/g-ir-scanner gobject-introspection-devel
Substitute: %{_bindir}/phpab php-theseer-autoload
Substitute: %{_bindir}/phpunit php-phpunit-PHPUnit

Substitute: %{_bindir}/rst2html python3-docutils
Substitute: %{_bindir}/sphinx-build-2 python2-sphinx
Substitute: %{_bindir}/valac vala

Substitute: /usr/bin/pygmentize python3-pygments
Substitute: /usr/bin/perl perl
Substitute: /usr/bin/iconv glibc-common
Substitute: %{_bindir}/hostname hostname
Substitute: %{_bindir}/a2x asciidoc
Substitute: /usr/bin/certtool gnutls-utils
Substitute: /usr/bin/socat socat
Substitute: /usr/sbin/ss iproute
Substitute: /usr/bin/cmp diffutils
Substitute: /usr/bin/rename util-linux
Substitute: /usr/sbin/sysctl procps-ng
Substitute: %{_bindir}/libgcrypt-config libgcrypt-devel
Substitute: /usr/bin/man man-db
Substitute: /usr/bin/dtrace systemtap-sdt-devel
Substitute: /usr/sbin/ifconfig net-tools
Substitute: %{_bindir}/sphinx-build python2-sphinx
Substitute: /usr/include/gnu/stubs-32.h glibc32
Substitute: /usr/bin/dbus-launch dbus-x11
Substitute: /usr/bin/2to3 python3-devel
Substitute: %{_bindir}/xsltproc libxslt
Substitute: %{_bindir}/sed sed
Substitute: %{_bindir}/sphinx-build-2 python2-sphinx
Substitute: %{_bindir}/sphinx-build-3 python3-sphinx
```

```
Substitute: python%{python3_pkgversion}-devel python3-devel
Substitute: python%{python3_pkgversion}-setuptools python3-setuptools
Substitute: python%{python3_pkgversion}-chardet python3-chardet
Substitute: python%{python3_pkgversion}-urllib3 python3-urllib3
Substitute: python%{python3_pkgversion}-idna python3-idna
Substitute: python%{python3_pkgversion}-pytest python3-pytest
Substitute: python%{python3_pkgversion}-pytest-cov python3-pytest-cov
Substitute: python%{python3_pkgversion}-pytest-httpbin python3-pytest-httpbin
Substitute: python%{python3_pkgversion}-pytest-mock python3-pytest-mock
Substitute: python%{python3_pkgversion}-pip python3-pip
Substitute: python%{python3_pkgversion}-wheel python3-wheel
Substitute: /usr/bin/dnf dnf
Substitute: /usr/bin/zip zip
Substitute: pkgconfig(libsystemd-journal) systemd-devel
Substitute: %{_prefix}/share/i18n/locales/de_DE glibc-locale-source
Substitute: /usr/bin/ssh-add openssh-clients
Substitute: /usr/bin/ssh-agent openssh-clients
Substitute: /usr/bin/ssh openssh-clients
Substitute:  /usr/bin/appstream-util libappstream-glib
Substitute: /usr/bin/xmlto xmlto
Substitute: /etc/init.d chkconfig
Substitute: %{_includedir}/linux/if.h kernel-headers
Substitute: /usr/bin/dbus-launch dbus-x11
Substitute: /lib/libc.so.6 glibc32
Substitute: /usr/lib/libc.so glibc32
Substitute: /lib64/libc.so.6 glibc
Substitute: /usr/lib64/libc.so glibc
Substitute: /usr/bin/qemu-img  qemu
Substitute: /usr/bin/pod2man perl-podlators
Substitute:  /usr/bin/appstream-util libappstream-glib
Substitute:  /usr/bin/xmlto xmlto
Substitute: /usr/bin/pod2html perl
Substitute: /usr/sbin/mke2fs e2fsprogs
Substitute: %{_libdir}/krb5/plugins/kdb/db2.so krb5-libs
Substitute: /usr/bin/gtk-encode-symbolic-svg gtk3-devel
Substitute: /usr/bin/dos2unix dos2unix
Substitute: /usr/bin/unix2dos dos2unix
Substitute: /usr/bin/which which
Substitute: /usr/bin/epstopdf texlive-epstopdf
Substitute: /usr/bin/desktop-file-validate desktop-file-utils
#Substitute: pkgconfig(libavcodec) ffmpeg-devel
Substitute: /usr/bin/valac vala
Substitute: %{_bindir}/xsltproc libxslt
```

```
Substitute: %{_bindir}/desktop-file-validate desktop-file-utils
Substitute: %{_bindir}/appstream-util libappstream-glib
Substitute: /usr/bin/ssh-agent openssh-clients
Substitute: /usr/bin/ssh-add openssh-clients
Substitute: /usr/bin/2to3 python3-devel
Substitute: /usr/bin/texi2dvi texinfo-tex
Substitute: /usr/bin/ssh openssh-clients
Substitute: %{_bindir}/pod2html perl-podlators
Substitute: %{_bindir}/pod2man  perl-podlators
Substitute: /usr/bin/pod2text perl-podlators
Substitute: /usr/bin/ping iputils
Substitute: /usr/bin/wget wget
Substitute: /usr/bin/qemu-img qemu-img
Substitute: /usr/bin/kreadconfig5 kf5-kconfig-core
Substitute: /usr/bin/xmllint libxml2
Substitute: /usr/bin/nc nmap-ncat
Substitute: /usr/bin/lsof lsof
Substitute: /usr/bin/ps procps-ng
Substitute: %{__perl} perl
Substitute: /usr/bin/rpcgen rpcgen
Substitute: %{_bindir}/latex texlive-latex
Substitute: /usr/bin/sphinx-build python2-sphinx
Substitute: %{_bindir}/sphinx-build python2-sphinx
Substitute: %{_bindir}/memcached memcached
Substitute: /usr/bin/tox python3-tox
Substitute: %{_bindir}/2to3 python3-devel
Substitute: %{_bindir}/mongod mongodb-server
Substitute: %{_bindir}/redis-server redis
Substitute: %{_bindir}/pkill procps-ng
Substitute: %{_bindir}/netstat net-tools
Substitute: %{_bindir}/gpg gnupg
Substitute: %{__make} make
Substitute: %{_datadir}/a2ps/afm/phvr.afm a2ps
Substitute: %{_bindir}/podselect perl-Pod-Parser
Substitute: /usr/bin/autopoint gettext-devel
Substitute: %{_bindir}/perl perl
Substitute: %{_bindir}/openssl openssl
Substitute: %{_bindir}/man man-db
Substitute: /usr/bin/zip zip
Substitute: /usr/bin/c++ gcc
Substitute: /usr/bin/makeinfo texinfo
Substitute: %{_includedir}/magic.h file-devel
Substitute: python2dist(markdown) python2-markdown
```

```
Substitute: %{_bindir}/python python-unversioned-command
Substitute: %{_includedir}/gnu/stubs-32.h glibc32
Substitute:  /usr/bin/dnf dnf
Substitute: /usr/bin/getopt util-linux
Substitute: mysql-devel mariadb-connector-c-devel
Substitute: gnupg gnupg2
Substitute: audiofile{?_isa} audiofile
Substitute: /etc/pki/tls/certs/ca-bundle.crt ca-certificates

Release: %{?release}

Macros:
%openeuler 1
%openEuler 1
%_specdir %{_topdir}/SOURCES
%openblas_arches  aarch64  x86_64

%_vendor openEuler
%_isa %{?__isa:(%{__isa})}%{!?__isa:%{nil}}
%vendor http://openeuler.org
%distribution Huawei openEuler
%packager http://openeuler.org

#for sign
%_signature gpg
%_gpg_path /home/abuild/.gnupg
%_gpg_name private OBS
%__gpg_sign_cmd         %{__gpg} \
    gpg --no-verbose --no-armor \
    %{?_gpg_digest_algo:--digest-algo %{_gpg_digest_algo}} \
    --batch --pinentry-mode=loopback --passphrase="" \
    --no-secmem-warning \
    %{?_gpg_sign_cmd_extra_args:%{_gpg_sign_cmd_extra_args}} \
    -u "%{_gpg_name}" -sbo %{__signature_filename} %{__plaintext_filename}

%kernel_module_package_buildreqs kernel-devel openEuler-rpm-config

%with_python3 1
%with_python2 1
%python3_pkgversion 3
#%__os_install_post %{nil}
%python3_pkgversion 3
%golang_arches %{ix86} x86_64 %{arm} aarch64 ppc64le s390x
```

```
%efi_arch aa64
%efi_vendor openEuler
%efi aarch64 x86_64
%unsignedaa64 shim-unsigned-aarch64
%unsignedx64 shim-unsigned-x64
%unsignedia32 shim-unsigned-ia32
%shimveraa64 15
%shimverx64 15
%shimveria32 15
%valgrind_arches %{ix86} x86_64 %{arm} aarch64 ppc64le s390x
%mono_arches %{ix86} x86_64 %{arm} aarch64 ppc64le s390x
%openblas_arches %{ix86} x86_64 %{arm} aarch64 ppc64le s390x
%with_ocaml 1
%dist .oe2309

%ext_info .gz
%ext_man .gz
#%_unpackaged_files_terminate_build 0

%info_add(:-:) test -x /sbin/install-info -a -f %{?2}%{?!2:%{_infodir}}/%{1}%ext_
%{nil}

%info_del(:-:) test -x /sbin/install-info -a ! -f %{?2}%{?!2:%{_infodir}}/%{1}%ex
%{nil}

# 2022-02-17 add automake
%gcc_secure_exclude "gcc-for-openEuler.spec|podman.spec|gcc.spec|arm-trusted-firm

%_build_id_links none

#custom macros
%openEuler 1
%disable_rpath \
sed -i 's|^hardcode_libdir_flag_spec=.*|hardcode_libdir_flag_spec=""|g' libtool \
sed -i 's|^runpath_var=LD_RUN_PATH|runpath_var=DIE_RPATH_DIE|g' libtool

%delete_la_and_a \
find $RPM_BUILD_ROOT -type f -name "*.la" -delete \
find $RPM_BUILD_ROOT -type f -name "*.a" -delete

%delete_la  find $RPM_BUILD_ROOT -type f -name "*.la" -delete

%chrpath_delete find $RPM_BUILD_ROOT/ -type f -exec file {} ';' | grep "\<ELF\>"
```

```
%package_help        \
%package        help \
Summary:        Documents for %{name} \
Buildarch:      noarch \
Requires:               man info \
\
%description help \
Man pages and other related documents for %{name}.

#%sbin_installinfo_rm bc.info
#%sbin_installinfo_rm bc.info.gz

%install_info() \
/sbin/install-info %1 %{_infodir}/dir || :

%install_info_rm() \
/sbin/install-info --remove %1 %{_infodir}/dir || :
:Macros

Prefer: perl-libs fonts-filesystem apr libnghttp2 dnf dnf-plugins-core mozjs60 gs
Prefer: nodejs-nan0 uglify-js boost-devel

Prefer: ccid libglvnd-devel device-mapper-persistent-data dbus-libs rpm-libs
Prefer: libffi7 libffi6 ima-evm-utils
Prefer: maven pipewire
Prefer: jetty-http jetty-io jetty-security jetty-server jetty-servlet jetty-util

Substitute: librpm.so.8()(64bit) rpm-libs
Substitute: "python(abi) = 3.7" "python(abi) = 3.8"

Macros:
%nocheck_exclude qt5-qtbase
%__brp_digest_list /usr/lib/rpm/brp-digest-list %{buildroot}
%nodejs_arches aarch64 x86_64
:Macros

%endif
```

Meta部分

```
<project name="openEuler:23.09">
<title/>
<description/>
<person userid="Admin" role="maintainer"/>
<repository name="standard_riscv64">
    <download arch="riscv64" url="https://mirror.iscas.ac.cn/openeuler-sig-riscv/
    <arch>riscv64</arch>
</repository>
</project>
```

配置了一个名为**standard_riscv64**的仓库，远程的链接地址写到**repodata**同级别即可。

后端配置

创建并进入目录：

```
mkdir -p /srv/obs/build/openEuler:23.09:Repo/standard_riscv64/riscv64/:full
cd /srv/obs/build/openEuler:23.09:Repo/standard_riscv64/riscv64/:full
```

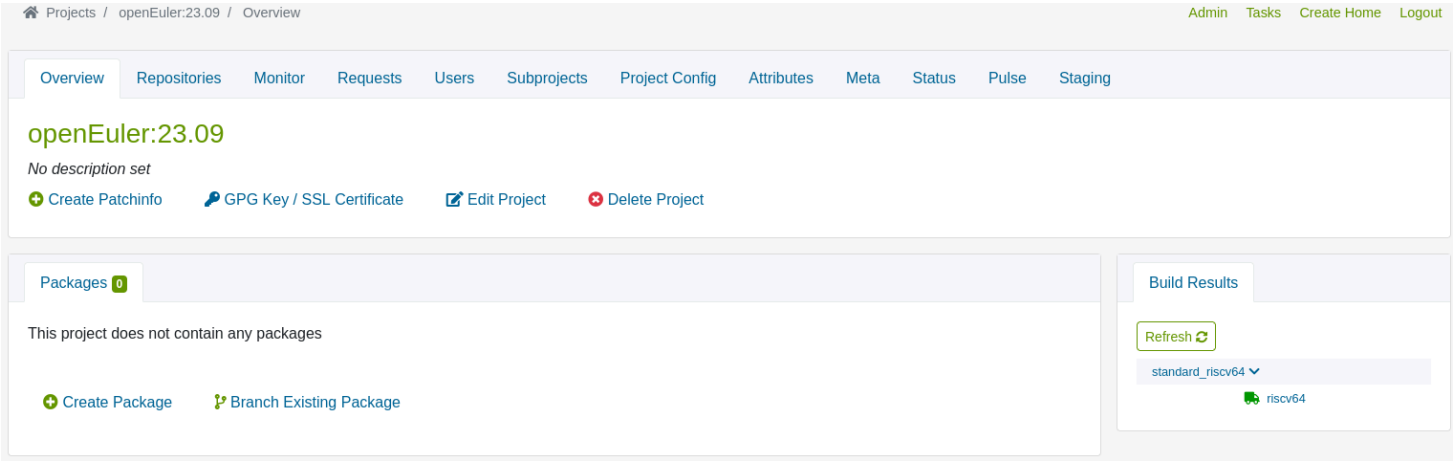
下载 primary.xml文件并目录更改所有者。

```
wget https://mirror.iscas.ac.cn/openeuler-sig-riscv/openEuler-RISC-V/obs/23.09/ma
mv  *-primary.xml.gz primary.xml.gz
gunzip primary.xml.gz
chown -R obsrun:obsrun /srv/obs/build/openEuler:23.09:Repo
/usr/lib/obs/server/bs_admin --rescan-repository openEuler:23.09:Repo standard_ri
```

注意：具体链接为：Meta中的链接/repodata/XXX-primary.xml.gz，其中XXX-primary.xml.gz选择最新的。

此时openEuler:23.09的:full目录没有rpm包，当配置好了openEuler:24.03之后，OBS会自动计算，并从远程仓库拉取rpm包到openEuler:23.09的:full目录中。

最后显示如下：



作为DoD的项目，Packages中不会有源包存在；Build Resuilts中仓库显示绿色小车表示仓库配置成功。

Tips:
如果基础项目采用的是非DoD的方式，如直接复制导入的包到:full目录，需确保导入的包所属的用户和组。

检查用户和组命令：

```
find /srv/obs/build ! -user obsrun
```

该命令不应该有输出，如有输出表示添加的包的所属用户和组有问题，需修改。修改用户和组命令：

```
chown -R obsrun:obsrun  /srv/obs/build
```

3、 openEuler:24.03

此次openEuler:24.03为baseos，有1192个软件包。手动在页面添加添加不符合实际，遂采用命令行方式（亦可参考命令行打包）导入软件包源文件。

导入软件包源文件

导入软件包源文件时，有两种方式：

1、通过_service文件，然后通过_service文件去openEuler的官方仓库下载软件包的源文件。

2、直接将远程仓库的源文件下载到本地，然后在本地上传到服务器。

通过_service文件

首先需要现在osc的配置文件中指定远程仓库的基本登录信息。
如果是安装后第一次使用osc命令，需要先链接OBS官方的生成配置文件，在修改。

```
osc co home:zd hello
```

打开osc的配置文件,修改：

```
vim /root/.config/osc/oscrc
```

具体配置如下：

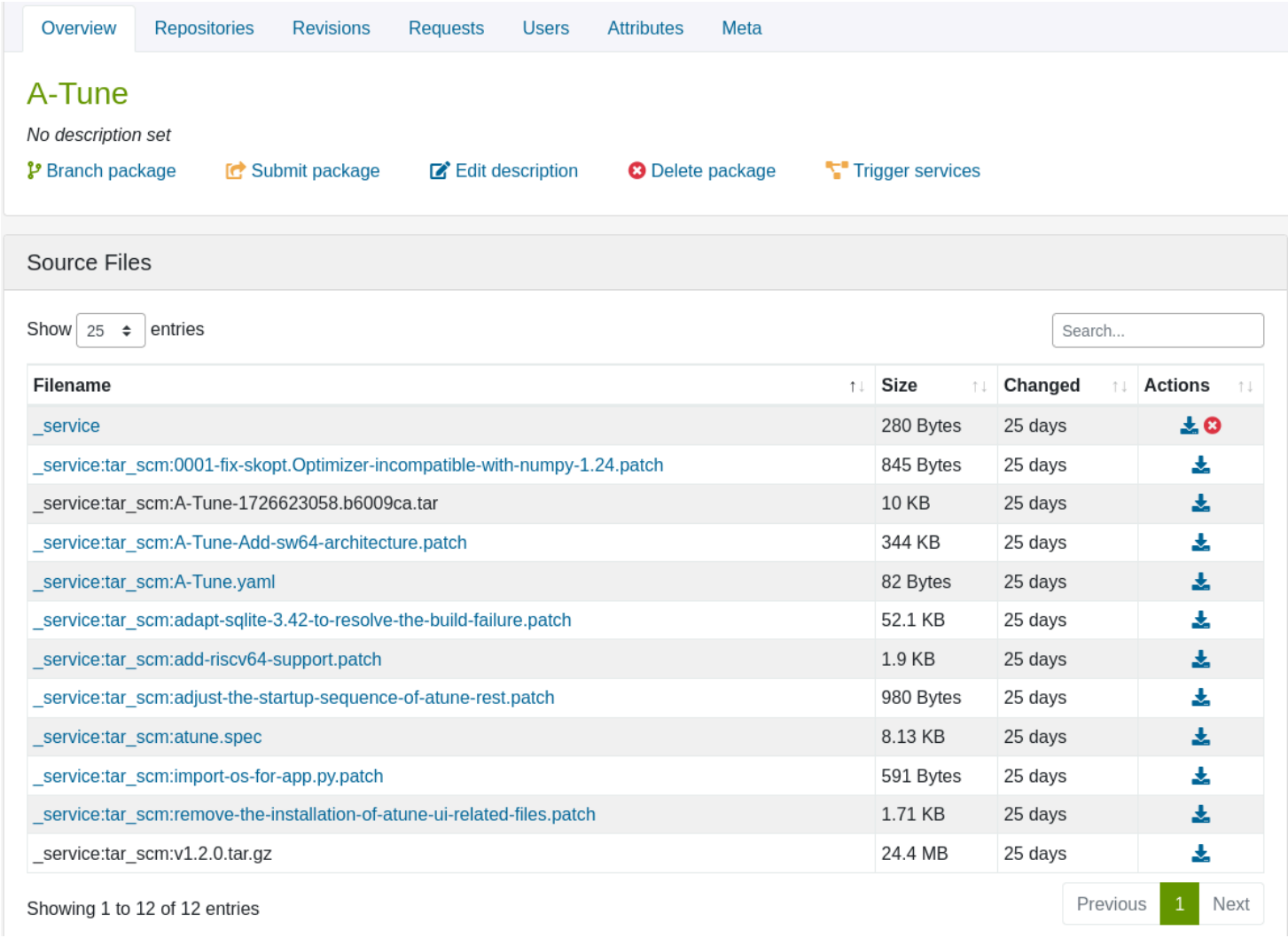
```
# see oscrc(5) man page for the full list of available options
[general]
# Default URL to the API server.
# Credentials and other `apiurl` specific settings must be configured in a `[$api
apiurl=https://leapfive.zobs.com

[https://leapfive.zobs.com]
# aliases=
# user=
# pass=
# credentials_mgr_class=osc.credentials...
user=zz
pass=123456
credentials_mgr_class=osc.credentials.PlaintextConfigFileCredentialsManager

[https://build.tarsier-infra.isrc.ac.cn/]
# aliases=
# user=
# pass=
# credentials_mgr_class=osc.credentials...
user=zd
pass=123456
credentials_mgr_class=osc.credentials.PlaintextConfigFileCredentialsManager
```

然后复制源包：

```
for i in $(osc -A https://build.tarsier-infra.isrc.ac.cn ls openEuler:24.03); do
    osc -A https://build.tarsier-infra.isrc.ac.cn copypac -t https://leapfive.zob
done
```

注意：第一条的osc命令是列出源地址里源项目的包；第二条的osc命令是从源项目中，依次复制_service文件到本地项目中，本地项目会根据_service文件去gitee拉取源包。
指定链接检出：

```
osc -A https://build.tarsier-infra.isrc.ac.cn co home:zd
```



本地直接上传

首先创建本地工作目录：

```
mkdir test_RPM
```

进入该目录

```
cd test_RPM/
```

检出项目到本地：

```
osc co openEuler:24.03
```

```
leapfive:/home/leapfive/test_RPM # osc co openEuler:24.03:BaseOS:02
A    openEuler:24.03:BaseOS:02
```

将源包复制到工作目录中：

```
rsync -v --progress /home/leapfive/scripts/tmp/baseos/ .
```

将所有文件添加到项目的版本控制中：

```
osc add *
```

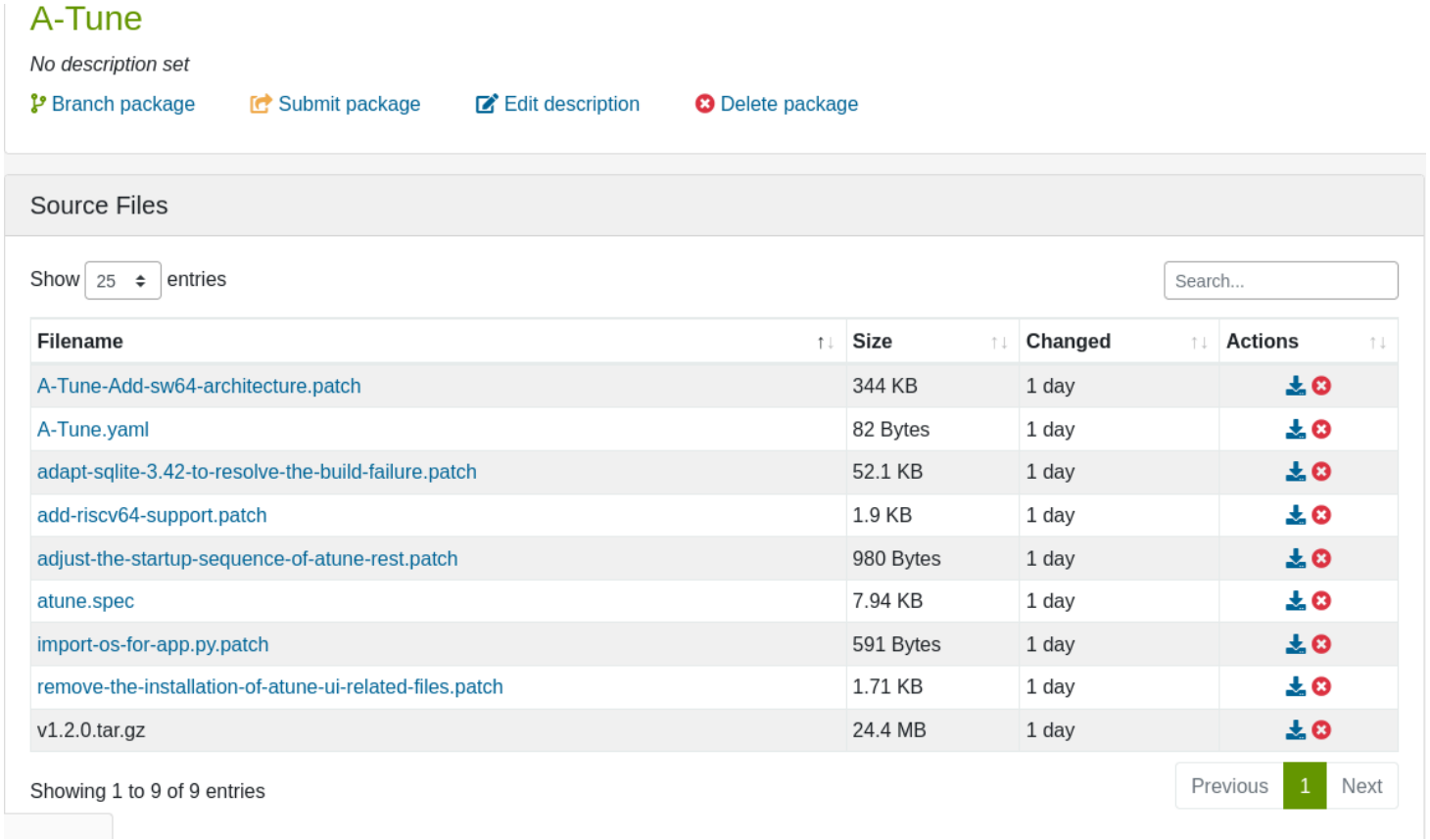
```
leapfive:/home/leapfive/test_RPM/openEuler:24.03:BaseOS:02 # osc add *
A    A-Tune/../A-Tune
A    A-Tune/A-Tune-Add-sw64-architecture.patch
A    A-Tune/A-Tune.yaml
A    A-Tune/adapt-sqlite-3.42-to-resolve-the-build-failure.patch
A    A-Tune/add-riscv64-support.patch
A    A-Tune/adjust-the-startup-sequence-of-atune-rest.patch
A    A-Tune/atune.spec
A    A-Tune/import-os-for-app.py.patch
A    A-Tune/remove-the-installation-of-atune-ui-related-files.patch
A    A-Tune/v1.2.0.tar.gz
A    CUnit/../CUnit
A    CUnit/CUnit.spec
A    CUnit/CUnit.yaml
A    CUnit/cunit-2.1-3.tar.bz2
```

提交更改(输入更改记录)：

```
osc commit
```

```
leapfive:/home/leapfive/test_RPM/openEuler:24.03:BaseOS:02 # osc commit
Default log message was not changed. Press 'c' to continue.
a)bort, c)ontinue, e)dit: c
Sending meta data...
Done.
Sending    A-Tune
Sending    A-Tune/A-Tune-Add-sw64-architecture.patch
Sending    A-Tune/A-Tune.yaml
Sending    A-Tune/adapt-sqlite-3.42-to-resolve-the-build-failure.patch
Sending    A-Tune/add-riscv64-support.patch
Sending    A-Tune/adjust-the-startup-sequence-of-atune-rest.patch
Sending    A-Tune/atune.spec
Sending    A-Tune/import-os-for-app.py.patch
Sending    A-Tune/remove-the-installation-of-atune-ui-related-files.patch
Sending    A-Tune/v1.2.0.tar.gz
Transmitting file data
Committed revision 1.
Sending meta data...
Done.
```

等待上传完成。



Project Configuration部分：

```
BuildFlags: logidlelimit:36000

#Constraint: sandbox docker
#Constraint: hardware:jobs 32
#Constraint: hostlabel OBS_WORKER_SECURITY_LEVEL_

#Constraint: overwrite:sandbox qemu
#Constraint: overwrite:hostlabel OBS_WORKER_SECURITY_LEVEL_
#Constraint: overwrite:hardware:jobs 8
#Constraint: overwrite:hardware:disk:size unit=G 100
#Constraint: overwrite:hardware:memory:size unit=G 14
#Constraint: overwrite:conditions:package libuv apache-commons-io apr at-spi2-atk
#Constraint: overwrite:conditions:package rust firefox kernel openjdk-1.8.0

Macros:

%dist .oe2403
# KubeOS需要root权限，但spec未申明，这里绕过
%__brp_strip   \
case %{name} in \
    KubeOS) %{nil} ;; \
    *)      /usr/lib/rpm/brp-strip %{__strip} ;; \
esac

#%__spec_check_pre exit 0
# nodejs-fast-levenshtein-1.1.3-2 parted-3.6-1 python-httpretty-1.1.4-6 python-py
# rubygem-thin-1.8.2-1 xkeyboard-config-2.39-3 rubygem-redis-4.7.0-3
# 以上各构建机均有测试失败。本地（增加超时）成功
# spdk-24.01-4 测试要求额外的大于2G的硬盘，sg2042不满足。本地增加后通过
# cloud-init-23.4.1-3 EBS自动安装了procps-ng。本地安装并增加超时后通过
# at-spi2-core-2.51.0-2 EBS自动安装了一些包。本地曾试着成功过一次
# debugedit-5.0-6 https://sourceware.org/bugzilla/show_bug.cgi?id=31653
# sscg-3.0.5-2 加密操作在sg2042下也大概率超时，偶有成功
# gtk-doc-1.33.2-6 OE看似无意修复测试失败
#%__spec_check_pre   %{___build_pre} \
#  case %{name} in \
#    nodejs-fast-levenshtein|parted|python-httpretty|python-pycurl|rubygem-thin|x
#      exit 0 ;; \
#    spdk|cloud-init|at-spi2-core|rubygem-redis|debugedit|sscg|gtk-doc)\
#      exit 0 ;; \
```

```
#  esac
:Macros
```

Meta部分

```
<project name="openEuler:24.03:BaseOS:01">
<title/>
<description>依赖是DoD的openEuler:23.09:Repo</description>
<person userid="Admin" role="maintainer"/>
<debuginfo>
    <enable/>
</debuginfo>
<repository name="9950x" rebuild="direct" block="never">
    <path project="openEuler:23.09:Repo" repository="standard_riscv64"/>
    <arch>riscv64</arch>
</repository>
</project>
```

Note:

rebuild="direct"表示将触发重新构建的条件设置为：仅构建源代码发生变化的包及其直接依赖的包，但不构建间接依赖的包.

block="never"表示将构建过程中包是否阻塞设置为：从不将包设置为阻塞状态，无论其依赖包是否已经完成构建。

后端配置

在配置好了Meta后，会自动地创建对应的后台目录以及文件。

其他

osc命令行

第一次使用时的配置

需提前安装osc

```
zypper install osc
```

两种方式，第一种是先链接官方的OBS，生成配置文件后修改成自己的OBS；第二种是直接配置自己的OBS。

第一种：以官方生成的模板修改

1、请在官方的OBS平台注册自己的账号密码。
2、在本地的工作目录执行：

```
osc co projectname
```

就会生成/root/.config/osc/oscrc文件，然后修改成自己的配置即可。

第二种：直接手动生成

增加osc配置，/root/.config/osc/oscrc文件：

```
#以root用户创建osc配置文件的目录
mkdir -p /root/.config/osc/

#创建osc配置文件
vim oscrc
```

内容如下：

```
# see oscrc(5) man page for the full list of available options

[general]
# Default URL to the API server.
# Credentials and other `apiurl` specific settings must be configured in a `[$api
apiurl=https://leapfive.zobs.com
#no_verify=1
#allow_http=1

[https://leapfive.zobs.com]
# aliases=
# user=
# pass=
# credentials_mgr_class=osc.credentials...
user=Admin
pass=opensuse
credentials_mgr_class=osc.credentials.PlaintextConfigFileCredentialsManager

[other adress]
# aliases=
# user=
# pass=
# credentials_mgr_class=osc.credentials...
user=xxx
pass=xxx
xxx
```

该配置文件是以[]为基本单位，其中**general**部分请填写自己的OBS域名，第一个[]中具体填写自己的OBS用户名和密码，其余的可以填写其他OBS用户名和密码（如官方的）。